DRMS Instruction 6055.1

DRMS-BC-WH

July 28, 2005

DEFENSE REUTLIZATION AND MARKETING SERVICE
SAFETY AND OCCUPATIONAL HEALTH
INSTRUCTION

A. REFERENCES.

1. 29 CFR 1910.180, Subpart N, Crawler, Locomotive, and Truck Cranes.

2. American National Standards Institute (ANSI) Standards Z87.1-1989.

3. ANSI Standards Z41.1.

4. 29 CFR 1910.29.

5. DRMS Instruction 6050.1, Instructions for Environmental Compliance for the DRMS Hazardous Property Program.

6. DoD 4160.21-M-1, Defense Demilitarization Manual.

7. MIL-STD-101, Color Code for Pipelines and for Compressed Gas Cylinders.

8. DLAI 4145.25, Storage and Handling of Liquefied and Gaseous Compressed Gasses and Their Full and Empty Cylinders.

9. DRMS Instruction 6055.1, Defense Reutilization and Marketing Service Safety and Occupational Health Instruction 6055.1, Sept 22, ***2002,*** (hereby superseded).

B. PURPOSE.

1. The types of property that flow through the disposal system, the condition of this property and its containers, present a variety of hazards that are unique to property disposal operations. The mitigation procedures in this instruction cover some of the disposal aspects that have either caused mishaps or have high mishap potential.

2. This instruction is intended to change as new procedures are developed to address new or previously undetected hazards. The Business Operations (DRMS-B), and Defense Reutilization and Marketing Offices (DRMOs) are encouraged to submit recommendations for additions or changes to this instruction through channels, to HQ DRMS, ATTN: DRMS-DDS or e-mail safety@mail.drms.dla.mil

3. This instruction contains references to other regulations, manuals, and handbooks. These publications contain policy, procedures, and standards, which may be updated or changed, causing a conflict with this instruction. Normally the more restrictive requirement will apply, but whenever conflicts are encountered with this instruction, the DRMS Safety and Health Office (DRMS-DDS) should be contacted for guidance.

4. This instruction supersedes reference A9.

C. APPLICABILITY AND SCOPE. This instruction is applicable to DRMS and all DRMOs.

D. DEFINITIONS. Specific definitions/acronyms for safety and occupational health are outlined throughout this instruction.

E. PROCEDURES. Specific procedures for safety and occupational health are outlined throughout this instruction.

F. RESPONSIBILITIES. Specific responsibilities for safety and occupational health are outlined throughout this instruction.

G. EFFECTIVE DATE AND IMPLEMENTATION. This instruction is effective and shall be implemented upon signature by the DRMS Executive Assistant.

H. INFORMATION REQUIREMENTS. (Reserved for future use.)

BY ORDER OF THE COMMANDER

/s/
JANINE DES VOIGNES
Executive Assistant

TABLE OF CONTENTS

CHAPTER V – STORAGE AND HANDLING

CHAPTER VI – RADIATION PROGRAM

CHAPTER I – MATERIAL HANDLING EQUIPMENT

A. CONVEYORS. Conveyors are an important part of the overall DRMO warehousing operation. Conveyors help move property quickly without the risk of having to manually move that property. However, conveyors also pose a mishap potential. The following procedures, when followed, will greatly reduce that mishap potential.

1. The conveyor will be inspected to determine if any hazards are present before starting operations.

2. No one will climb over or crawl under conveyors. Climbing devices, access ladders or elevated walkways will be used to get over conveyors.

3. All exposed edges or conveyor areas near designated travel ways will be guarded, roped off, or barricaded.

B. CRANE OPERATIONS. The following is provided as guidance to be used in your crane operating procedures. It is not all inclusive; you should add precautions based on the requirements of your Host and local area.

1. **Operator Qualifications:**

a. Only certified and licensed personnel will be allowed to operate a crane. Operators will be familiar with the requirements of subpart N, 29 CFR 1910.180, Crawler, Locomotive, and Truck Cranes. Part of the certification must include a 1 week, formal crane operator safety course. Operators will be recertified annually.

b. The operator's manual for each crane will be immediately available to the operator.

c. Contractors will have all necessary certifications prior to working at the DRMO. This includes certification for both Government Equipment and privately owned equipment. Contract employees working with Government owned equipment will receive equipment orientation for a certified DRMOS MHE instructor prior to the commencement of work.

2. **Testing:**

a. All cranes will comply with the manufacturer's specifications. When manufacturer's specifications are not available, operational limits will be established by a qualified professional. These limits will be documented locally in the master equipment file and copy sent to the DRMS equipment section.

b. Prior to use, all new, extensively repaired, or altered cranes will be recertified by a qualified individual. The new certification will be added to the master equipment file locally and a copy sent to DRMS equipment section. These certificates shall be made available upon request to any regulatory agency.

3. **Load Chart:** A rating chart with clear legible letters and figures shall be provided for each crane. It will be securely fixed to the crane cab, clearly visible to the operator while seated at the control station.

4. **Inspections:**

a. All cranes shall be inspected prior to use by the operator using DRMS Form 1655, Crane Operator Daily Checklist or its equivalent. Deficiencies noted will be carefully examined to determine whether they constitute a safety hazard and require immediately corrective action. Inspection records must be maintained for a minimum of 6 months.

b. Complete inspection of all cranes and associated lifting devices will be performed monthly by host activity, or a trained and certified crane operator. This inspection will include the following items and a written, dated, signed repot and record of condition will be maintained for 3 years. This report will be maintained in the master equipment file.

(1) Crane structure and hardware.
(2) Running wire ropes.
(3) Other wire ropes.
(4) Wire ropes termination and fittings.
(5) Other specialized attachments or items as required by the manufacturer.

c. Deficiencies identified will be analyzed to determine if the crane should be taken out of operation until repairs are accomplished. Final determination of the operability of any crane rest with the operator.

5. **Operating Requirements for Cranes:**

a. Only qualified operators will operate a crane.
b. Loads must not be carried over the heads of people.
c. The operator will not leave his position at the controls while the load is suspended or while the crane is running.
d. All cranes using a lifting magnet must have a switch in the magnet circuit to lock the switch in the open position.
e. When the hook is in its lowest position and the boom is at its maximum elevation, at least two complete wraps of cable must remain on the drum and the ends must be securely attached to the drum.
f. Hand signal charts will be posted so they are clearly visible to the operator.
g. The minimum clearance of 15 feet must be maintained between any part of a crane and energized wires. If the status of the wires cannot be determined they will be treated as energized.
h. Crane shall not be used to lift personnel without prior written approval from the DRMS Safety and Occupational Health Manager (SOHM).

6. **Slings:**

a. Prior to use, slings and all fastenings and attachments will be inspected.
b. The following practices are mandatory when using a sling:
(1) Damaged or effective slings will not be used.
(2) Slings will not be shortened with knots, bolts, or make-shift devices.
(3) Sling legs will not be kinked.
(4) Slings will be padded or protected from the sharp edges of their loads.
c. Contractors using Government equipment will also be responsible for inspecting slings prior to use. Contractors using their own slings (and cranes) will provide the DRMO with a copy of their **Sling Program.**

7. **Wedge Sockets:** Wedge sockets must be properly rigged or the lifting capability will be affected. Never clip the dead end of the wire rope to the load end.

8. **Rigging Magnets:** Power supply cables to a magnet must be supported in a vertical position to prevent cable damage. Power supply cables will not be clamped to the wire rope.

C. FORKLIFTS

1. Modification or additions to forklifts are not permitted without an evaluation by DRMS Safety and Health Manager and approval or manufacturer and the Commander, DRMS.

2. Forklifts used in scrap yard operations will have a wire mesh screen, polycarbonate sheeting, or suitable material attached to the overhead guard and mast. This does not replace or eliminate the need for hard hats and safe practices. These guards will be attached without drilling or welding of the mast, lifting components, or over head guards.

3. Maximum forklift speed limit inside a warehouse is 5 miles per hour. Speed limits outside a warehouse will be established by the DRMO chief.

4. Inspections. All forklifts will be inspected prior to being placed in service. Deficiencies noted will be examined to determine whether they affect the safety or operability of the forklift and require immediate corrective action. Inspection records will be maintained for a minimum of 6 months. Operators working in a contractor shared equipment environment will inspect their MHE every time it is turned back to their control. The contractor will inspect and record every time an MHE is turned over to their control. This minimizes mechanical fault.

5. **Forklift Operation:**

a. Only trained and properly certified operators will operate forklifts.

b. No person shall be allowed to stand or pass under any elevated portion of a forklift.

c. No riders shall be permitted on forklifts.

d. When a forklift is left unattended, forks will be fully lowered, controls neutralized, power turned off, and brakes set. The wheels shall be chocked if the forklift is parked on an incline. The keys will be removed from the ignition.

e. When ascending or descending grades in excess of 10 degrees, loaded forklifts will be driven with the load upgrade. Unloaded forklifts will operate on all grades with the forks downgrade.

f. If any lifting components are repaired or replaced the forklift will be load tested prior to being placed back into service.

g. If the load obstructs the driver’s view, the driver will travel with the load trailing.

h. Contractors using Government MHE must be certified prior to operating the MHE. MHE orientation will be provided to the contractor on the government equipment prior to commencement of work.

i. The contractor will provide DRMS Safety and Health office with a copy of their accident report, should any contract employee be involved in a mishap which causes damage to either government equipment or government facility. The DRMO should also complete a DLA 1591 and submit it to the Headquarters Safety and Health office.

j. Hard hats will be worn when moving material above eye level. Hard hats will also be worn working in the yard. Hard hat policy may be determined at the local level by the DRMO Chief and/or Zone Manager.

6. **Electric Forklifts:**

a. All electric forklift operators will know the location and use of the emergency override (panic) controls. These panic controls will be function checked prior to use. Any power-operated industrial truck not in safe condition will be removed from service and repaired.

b. Charging Storage Batteries.

(1) Battery charging installations shall be located in well ventilated, designated areas.

(2) Equipment will be provided for flushing and neutralizing spilled electrolyte, fire protection, protecting charging apparatus from damage, and ventilation.

(3) Trucks shall be properly positioned and the brake applied prior to charging batteries.

(4) When charging batteries, the manufacturer's supplied procedures will be followed.

(5) Smoking shall be prohibited in the charging area.

(6) Precautions will be taken to prevent open flames, sparks, or electric arcs in battery charging areas. The local fire department can be consulted for guidance.

(7) Tools and other metallic objects will be kept away from the battery terminals.

c. Battery installation and removal is not the responsibility of the DRMO. These tasks will be accomplished by maintenance personnel.

D. PALLETS. Pallets are a part of the material handling operation. To ensure proper usage and condition, the following elements must be considered:

1. No material must be stored on broken pallets.
2. All pallets will be of sound construction.
3. Loads must fit securely on the pallet.
4. Loads must be distributed evenly on the pallet.

E. WAREHOUSE TRACTORS AND TRAILERS

1. Warehouse tractors are designed to pull a train of warehouse trailers. When used with forklift trucks, the warehouse tractor-trailer train nearly eliminates manual handling of property.

2. Precautions that must be considered when using the tractor-trailer train operation are:

a. Traffic regulations.
b. Trailers coupling.
c. The maximum number of trailers will not be exceeded.
d. Loads being transported will be lashed, if necessary.
e. The load immediately behind the tractor will not block the operator's view of the other loads.
f. The maximum speed limit inside a warehouse is 5 miles per hour. Speed limits, for tractor-trailer combination, outside the warehouse will be established by the DRMO Chief.
g. When entering or leaving a warehouse, come to a complete stop, sound horn, and proceed only when the way is clear.
h. Reduce speed when crossing railroad tracks and unlevel roadways. When possible, cross at an angle.
k. Trailers will be maintained in a safe operating condition. Deck planking must be complete and in good condition.

F. **MHE Training.**

1. Operators will be trained by their host or installation transportation offices whenever possible. In addition, all MHE operators will receive supplemental training from their DRMS Zone MHE trainer. All training shall be in accordance with the rules and

regulations pertaining to the host installation, and 29 CFR 1910.1788 (1).

2. Operators are required to have annual refresher training and refresher training whenever the following conditions occur:

   a. The operator was involved in a mishap.
   b. The operator's workplace conditions or workplace environment changed in such a manner that could effect the safe operation of MHE equipment.

3. Crane training will consist of 40-hour initial crane training at a commercial training facility. Every third year, crane operators will refresh their crane training at the same or comparable training facility. Videos are available for crane operators to view during the off years. If the host installation requires annual crane training, the operator will abide by this regulation. Contract crane operators will follow all training requirements as stated in the 29 CFR and host regulations.

CHAPTER II – PERSONAL PROTECTIVE EQUIPMENT (PPE)

1. Personal Protective Equipment (PPE) is required for all job hazards that cannot be removed by engineering methods or otherwise controlled administratively. The DRMO is responsible to assure that the workplace is assessed to determine if hazards are present or are likely to be present, requiring the use of PPE. It is recommended that the host Industrial Hygienist and or Safety Office assist in making this determination. The employee's supervisor is required to document that this hazard assessment was accomplished before the employee begins work.

2. If the assessment determines that PPE is necessary, the DRMO is responsible to assure that the affected employee(s) receive training in the selection and proper use of the PPE. Training will consist of: when PPE is necessary, what PPE is necessary, how to properly don, doff, adjust and wear PPE, the limitations of the PPE, and the proper care, maintenance, useful life and disposal of the PPE. The employee then must physically demonstrate their understanding of this training to the DRMO supervisor attesting to this demonstration of proficiency. A written certification will be prepared by this supervisor to verify that the affected employee(s) have received and understood the required training. The certification forms for the hazard assessment and the PPE proficiency demonstration may be found at the DRMS-KH safety web-site.

PPE requirements for the various DRMO job tasks are found in enclosure 2 of this instruction.

A. PROTECTIVE EYEWEAR

Note: All managers and supervisors should make it a point to check the status of critical emergency equipment at least daily.

1. Eyesight can be lost in a split second. This loss does not have to be the result of a heavy or severe blow. Eyesight can be lost from a very small object, such as a piece of flying metal from a grinder, a defective hand tool or even debris blown by the wind.

2. Only approved (ANSI Z87.1-1989) eye protection will be worn when operations pose the potential for eye injuries. When the hazard is from flying objects, eye protection will provide side protection. Full time wear of eye protection is not considered excessive. Progressive Lenses are not reimbursed.

3. **Industrial Safety Glasses.** Industrial Safety Glasses, Plano, or prescription, will be issued as no cost if an employee is working in an eye hazard area. Casual employees or employees walking through eye areas (intermittingly) should utilize eyeglass shields or goggles, which fit over their non-industrial or personal eyewear.

4. **Eye examinations.** Eye examinations required for prescription safety glasses will be provided at government expense if the employee previously has not worn prescription safety glasses or where a vision screening discloses that the present prescription (or glasses) is inadequate. Eye examinations may be obtained at a nearby military installation, contract or by the employee's personal physician. An employee may obtain and be reimbursed for an eye examination provided by their own private physician, only if it is impractical to obtain such services from a military installation through their Interservice Support Agreement. Prescriptions written by an employee's own doctor may be used provided that the prescription is less than one year old and the vision screening detects not change. Examinations other than those authorized are not reimbursed.

5. The issuance of prescription industrial safety glasses will be recorded. The procurement of safety glasses is not an annual benefit. Safety glasses that are not worn and still in good condition may be used indefinitely, provided the prescription does not change. All safety glasses must be purchased with the fixed, screwed on side shields.

6. The use of the goggles, full-face protection, or absorptive lenses will be required when as stipulated by the DRMO Chief and/or Zone Manager. If the DRMO Chief designates the use of the above PPE, and the employee elects to purchase their own glasses, these personal safety glasses may be approved. All safety glasses procured by the government are the property of the government.

7. The government, except where the Zone Manager has approved their use, normally will not provide prescription sunglasses. Tinted glasses should not be worn unless called for by nature of particular occupations or when prescribed by the doctor.

8. Photo chromatic, phototropic variable tint or tinted lenses for safety glasses normally will not be issued. Such safety glasses meeting the impact, thickness and optical requirements of ANSI Z87.1-1987 may be issued in those rare and unusual cases where the employee's doctor understands the intended on the job use of the glasses and certifies that the employee has a visual handicap that requires these lenses. In addition, the Zone Manager must determine that the employee will not be a hazard to themselves or other employees. Individuals with such a visual handicap and their supervisors must be made aware of the fact that, while wearing variable tinted lenses, visual acuity is reduced when entering buildings and that these lenses are darkened by near ultra-violet radiation; therefore, they will become perceptibly darkened by many types of fluorescent lens at normal working distances. Phototropic lenses are not allowed for indoor application and are only allowable for outdoor task, which do not involve hazardous ultraviolet or infrared radiation, or both.

9. Employees shall be reimbursed for eye examinations, frames, and lenses. Current reimbursement costs are located in the DRMS Safety and Health Office.

10. An emergency eyewash or deluge shower is needed where the eye or body may be exposed to hazardous materials. The shower head should be capable of delivering 113.6 liters per minute (30 gallons per minute) of water at a velocity low enough not be injurious to the user. The eyewash must be capable of opening (and staying open) within one second and deliver a minimum of 1.5 liters per minute (0.4 gallon per minute), with the flushing steams rising to the same height, flushing both eyes simultaneously, with a velocity low enough not to be injurious to the user. Eye/face wash units and emergency deluge showers both must be located within 10 feel of unimpeded travel distance from the hazard or, in the alternative, within the distance recommended by a physician or appropriate official the employer consulted. It is recommended that showers and eyewashes be activated daily prior to the start of work. The receptacles of the eyewash must be protected from any airborne contaminants. Whatever means is used for this protection, its removal shall not require a separate motion by the operator upon activation. There shall be no sharp projections anywhere in the operating area of the unit. It is recommended all shower and eyewash units be flushed as often as needed to keep the water clean and clear.

11. Other types of eyewashes include the pressurized eyewash, the non-pressurized eyewash, and the small personal eyewash units. The requirements for flushing these are dictated by local requirements. DRMOs will contact their host safety and industrial hygiene departments for flushing time requirements. Many of these units use a bactericide to prolong water life.

12. Because of varying locals and climactic conditions, DRMOs will request assistance from their host industrial hygienist for the frequency of water change, and adding and type of the bactericide. Using the space around eyewashes/deluge showers for storage, forklift parking areas, lunch areas not only violates OSHA but places you and your co-workers in an extremely dangerous situation. It is everyone’s responsibility to ensure that the tools and equipment needed to do the job are available, working properly, and access to them is not blocked.

B. PROTECTIVE FOOTWEAR

1. Protective footwear are required to prevent injuries to the feet resulting from punctures, pinching or crushing caused by falling or rolling objects. Employees shall wear safety shoes with leather upper construction, when the PPE hazard assessment requires them for personal protection. Employees working in the scrap yard shall wear steel toed work boots. Foot protection must meet ANSI Z41.1, class 75 standards.

2. Canvas steel-toed shoes can be worn in warehouses or in designated areas with the approval of the DRMO Chief, Zone Manager or the host Safety Manager. The employees Hazard Assessment or Personal Protective Certification Form must indicate this.

3. Steel toed shoes will be purchased by the government when needed. The DRMO Chief or Zone Manager will determine the frequency of purchase. The cost of the shoes will be inherent on the geographic location of the DRMO, the DRMO Chief, and the Zone Manager. The government charge card (IMPAC) card will be used for procurement when ever possible.

4. Whenever possible and cost efficient, Zone Managers and DRMO Chiefs should encourage Footwear recycling. Having employees have their safety shoes reconditioned in lieu of purchasing a new pair can do this. This only applies to shoes whose condition is satisfactory and only souls and heals is required. Prior to purchasing new shoes for an employee, the condition of the shoe is to be examined using common

sense and considering any medical condition. Prior to making this determination a thorough examination of both the outside and the inside of the shoe must be done. Remember, there is no time limit on the procurement of the safety-toed shoe. Some employees may require more than one pair per year, depending upon wear and environmental conditions, while others may require one pair every two or three years. The Zone Manager and DRMO Chief will make this determination.

5. Depending on your location, some shoes can be recycled via your host. If your host has a means of recycling shoes, whenever you receive a new pair, you are encouraged to donate your old shoes to this recycling center. You're DRMO Chief or supervisor will assist you.

C. PROTECTIVE HEADGEAR.

1. All employees in hardhat areas or operations designated by the DRMO Chief or the host safety manager will wear protective headgear.
2. Bump caps will not be worn as a substitute for hard hats.
3. Drilling ventilation holes or trimming brims will not be done.
4. Protective headwear should be inspected by the employee daily and the first line supervisor monthly, to assure that the suspension is properly installed and the hats fit properly; and they are free of cracks, holes, or other imperfections which will negate their protective qualities.
5. The requirement also applies to visitors.

D. RESPIRATORS

1. Our cutting operations involve oxygen-acetylene, plasma arc, air arc, burning bar, and "chop" saws. Every method of cutting involves a different gas, a different rod or bar, and most importantly, a different metal or alloy. This generates a variety of fumes, particulates, and gases emitted at different concentrations, which will vary from DRMO to DRMO. Because of this, you are required to follow several steps to protect your employees and to comply with OSHA. Your first step is to contact your host Industrial Hygienist for a hazard assessment. The host Industrial Hygienist will study your particular cutting operation, and perform air sampling to determine the need for a respirator, or engineering controls. If a respirator is required, the second step is to consult with your host Industrial Hygienist to arrange for a medical evaluation and to determine the best type of respirator for your operation. Your host Industrial Hygienist will advise you of the different types which are suitable. The third step is to have your host Industrial Hygienist fit test and train your employees. This training must include the discussion of the specific hazards of the chemicals or by products generated from cutting; and the testing, cleaning and caring for respirators. Your fourth step is to complete a "Personal Protective Equipment, Hazard Assessment Certification" form for every employee performing metal cutting.

2. Remember, if training is not documented, it has not been performed. Each supervisor will ensure the following is current and kept on file:

a. A Personal Protective Equipment Hazard Assessment Certification form for each metal cutter.
b. A log of all metal cutters attending hazard communication training.
c. A written copy of the respirator program that includes the following:

(1) Standard operating procedures governing the selection and use of respirators.

(2) Respirators shall be selected based on the host Industrial Hygienist's hazard assessment.

(3) Training outlines detailing the proper use of respirators and their limitations.

(4) An explanation of why engineering controls are not in place or inadequate and what efforts are underway to reduce or eliminate respirator use.

(5) Cleaning and maintenance schedule approved by the host Industrial Hygienist. Respirators used by more than one worker shall be thoroughly cleaned and disinfected after each use.

(6) Respirators shall be stored in a convenient, clean, and sanitary location.

(7) Respirators used routinely shall be inspected during cleaning. Work or deteriorated parts shall be replaced.

(8) Surveillance of work area conditions and degree of employee exposure or stress shall be maintained.

(9) There shall be regular inspection and evaluation to determine the continued effectiveness of the program.

(10) Persons should not be assigned to tasks requiring use of respirators unless it has been determined that they are physically able to perform the work and use the equipment.

(11) Respirators shall be selected from among those approved by the National Institute for Occupational Safety and Health under the provisions of 30 CFR parts 11.

d. Written certification of respirator fit testing.

e. Written certification of respirator training.

f. Copies of a written examination for each employee trained. Each employee receiving metal cutting training will be tested and copies of the test will be filed by the supervisor. The test will be composed of job hazards, hazardous communication, and metal cutting safety. Each supervisor will keep a copy of this examination on their files.

g. Records of annual refresher training for each employee.

h. DRMOs will follow all the steps as above, when any new changes occur in your operation. These changes may include different metals or different equipment.

i. Baseline physicals for all employees metal cutting any heavy metals.

E. WORK CLOTHES. Mishaps and injuries can be prevented by following a few simple rules:

1. No loose sleeves, torn pants, neckties or scarves.

2. No rings or wrist bracelets.

3. No grease, oil, or gasoline stained clothing.

4. Do wear close fitting clothes, with long sleeves.

5. Short pants; cut-off shirts and tees are only worn when the supervisor or DRMO Chief gives permission. Short pants are not to be worn when working around scrap yard operations.

6. Other PPE shall be furnished when required by the DRMO. These include face shields, protective creams, protective gloves, welding aprons, welding pants, or material deemed necessary by the host safety manager.

F. PROTECTIVE CLOTHING.

1. Protective clothing will be provided for the prevention of injury and disease; e.g., protection against hazardous and toxic chemicals, heat and hot metal cryogens, impact and cuts, and other hazards identified by the DRMS Safety and Health Office.
2. Rain gear is not considered PPE. Employees should provide their own rain gear for the performance of their normal duties during periods of poor to mildly inclement weather. If the weather does become a factor, the host industrial hygienist, safety manager, or the Zone Manager can approve a waiver for government purchase. The rain gear will then be retained at the DRMO. Procurement is by IMPAC card.
3. Employees will be issued foul weather gear only when duties require working in harsh or severe weather. These items will not be issued for personal use, but will be retained at the DRMO. As with rain gear, the host industrial hygienist, safety manager, or the Zone Manager must approve and a waiver can be obtained. Foul weather gear will be purchased using the IMPAC card.

G. PROTECTIVE HEARING DEVICES.

1. Employees working in or entering a designated noise hazard area must have hearing protection available. When hazardous noise sources are operating, employees shall wear protective hearing devices.
2. Noise hazards in the DRMO workplace are identified by the installation industrial hygienist.
3. Personal hearing devices will be issued at no cost to personnel operating noise hazardous equipment or working n designated noise hazardous areas. Personnel working in or entering designated noise hazardous areas must have hearing protective devices in their possession at all times, in accordance with 29 CFR 1910.95, and when noise hazardous sources are operating, personnel shall wear their hearing protective devices regardless of exposure time.
4. Supervisors will ensure that these protective devices are worn wherever personnel are exposed to noise levels at or greater than the standard prescribed in 29 CFR 1910.95.
5. Earplugs or muffs available through the Federal Supply System that are listed in TB MED 501 will be supplied. Personnel will be permitted freedom of choice of various hearing protective devices (e.g. single or triple flange plugs or muffs) unless medically inappropriate for the noise hazardous area or operation.
6. Preformed earplugs shall be fitted only under medical supervision and will be issued with a carrying case. Insertion, seating, and cleaning techniques will be explained when earplugs are issued.
7. Dry cotton provides essentially no noise attenuation and will not be used as hearing protective devices.
8. Employees will wear their hearing protective devices as instructed and maintain them in a sanitary condition as prescribed in 29 CFR 1910.95.

H. Personal Protective Equipment Certification Forms.

1. Personal Protective Equipment and Hazard Assessment forms are to be completed for all employees working at the DRMO. These forms are to be completed by the supervisor. Copies of these forms are located on the DRMS web site and are required for this purpose.
2. The purpose of the Personal Protective Equipment Certification form is to ensure that all employees are properly trained and instructed on how to perform the job, the hazards pertaining to the job, and the correct personal protective equipment to wear when doing the job. **See enclosure 6.**

3. PPE Certification Forms are necessary whenever specialized PPE clothing is permitted, such as foul weather gear, rain gear, etc. The PPE Certification Form must clearly reflect the reason for the specialized clothing and how it becomes a hazard to the employee if not used, i.e., what environmental conditions created the hazard and how this hazard affects the employee.

CHAPTER III – MACHINERY AND SUPPORT EQUIPMENT

A. BALERS (Metal and Paper). All balers must be guarded to ensure the ram or compacting device cannot be activated until workers are out of the danger area. On balers where scrap is put into a pit prior to compression, an interlocking device which allows operation of a ram only after the loading gates are closed and in place must be used.

B. FIRE EXTINGUISHERS. The type of fire extinguisher provided depends on the type of exposure (fire). The location of fire extinguishers must be clearly identified. Regardless of the owner, extinguishers will be visually inspected monthly and a log of such inspections maintained in the files. This log can be a sticker, card, or computer generated log. All employees must be trained in the proper used of all fire fighting equipment in their work area. This training should be annual. The RMO Chief or supervisor should contact the host fire marshal or safety office to determine host policy for fire control. If the policy for the host i.e. evacuation, and fire control is accomplished entirely by the host fire department, then training would not be required. All fire extinguishers should be serviced annually. A monthly inspection should consist of checking the seal, if one is provided, pressure gauges, hose and general condition of the extinguisher. Additionally, it allows the inspector to ensure the extinguisher is where it is supposed to be and the access to it is clear of any obstacles. A fire extinguisher is a tool. Just as all tools are checked before you begin work for the day, you should check that the fire extinguisher is there and appears to be working. This daily check will aid the person tasked with the monthly check in catching and preventing problems. A part of your annual training, your host fire marshal will provide information on the types, care, and rules and regulations pertaining to your fire extinguishers. Extinguishers must be properly maintained and fully charged. All employees must be training in the proper use of all fire fighting equipment in their work area. The servicing extinguisher company should be doing a detailed yearly inspection and affixing notice of such a yearly inspection to the extinguisher. A monthly inspection should consist of checking the seal, if one is provided, pressure gauges, hose and general condition of the extinguisher. Additionally, it allows the inspector to ensure the extinguisher is where it is supposed to be and the access to it is clear.

C. FIRST AID KITS/CPR.

1. The decision to place a first aid kit in any vehicle is based on local needs and/or requirements. DRMOs are to seek advice on policy from their host safety and Industrial Hygiene departments regarding rules and regulations pertaining to first aid kits in their government or GSA vehicles. The types of first aid kits, contents, etc., are to be determined by your host.
2. Recently, the U.S. Department of Labor’s Occupational Safety and Health Administration (OSHA) issued citations to a Navy activity for noncompliance with the blood borne pathogen standard. These citations were written for (1) failure to have a written exposure control plan; (2) failure to provide a blood borne pathogen training; (3) and failure to offer Hepatitis B vaccinations to first aid responders. The standards for this are written on the Safety and Health Web Page, under “Blood borne Pathogens”.

3. In order to comply with the blood borne pathogen standard, all DRMO Chiefs must offer Hepatitis –B vaccinations and blood borne pathogen training to all employees trained in CPR and First Aid.
4. A minimum of one person for every 25 employees must be trained in CPR and First Aid. There must be enough trained people at a DRMO so that a trained person is present at all times. A waiver will be issued provided the DRMO can obtain written proof that a medical responder can provide emergency within 5 minutes or less.
5. To determine who is covered under the DRMS Occupational Health Program Exposure Control Plan, it requires that all personnel be categorized by ***always exposed, never exposed, and sometimes exposed.***
6. Most positions or classifications in DRMS are *never exposed.* Personnel trained to perform First Aid/CPR, housekeeping, recreation specialists, firefighter, physical security specialist are considered *sometimes exposed* and are covered under this standard. Positions such as nurse, doctor, or paramedic are considered *always exposed* and are covered under this standard. No matter what the classification a person may be (never exposed, sometimes exposed, or always exposed) exposure can occur to anyone. Determination of an exposure should be made by a medical professional, and a mishap form and CA-2 form should be completed.
7. It is imperative that all of your CPR and First Aid designated personnel are trained in Blood borne Pathogens requirements, and receives the Hepatitis-B vaccination series and or sign a declination statement. DRMOs must make these available free of charge and at a reasonable time and place to all employees. Your host safety/industrial hygiene department should be able to provide these requirements under the ISA or you can obtain them from a community source.
8. For CPR/First Aid, below is a list of items all activities should have readily available for use and all items can be purchased local, if necessary:
    a. Latex gloves, NSN 6515-01-342-3002, Description: Package of 50 pairs of disposal and non-sterile rubber latex, contaminated fluid protective gloves. Roll beaded cuff, size 8 ½ large, protects medical personnel from contamination in trauma situations where there is bleeding and other bodily fluids.
    b. Red bags, NSN 8105-01-361-1746l; Description: High density 3-ply material, puncture resistant; holds infe3ctioius wastes for ultimate processing within an autoclave oven; fits any container round; square; oblong, etc./ 8, micron; 45 gallon capacity; 40 x 46; printed with the warning message and bio hazard symbol, 100 per package.
    c. One-way valve CPR mask, NSN 6515-01-354-1082, Description: Facemask, cardiopulmonary resuscitation; clear plastic disposable, used to prevent cross contamination during CPR.

D. GRINDERS.

1. All grinders will be equipped with a work or tool rest, adjusted to no more than on-eighth inch from the grinding wheel. The adjustable tongue or guard on the top of the peripheral member shall never excess one-fourth inch from the grinding wheel. An end guard must be place on all grinding wheels. Eye and face protection will be worn at all times when using grinders. The host IH should be contacted to conduct a noise hazard assessment to determine if hearing protection will be required.

2. All new grinding wheels will be "ring tested" prior to use. The bursting of a grinding wheel may cause serious or fatal injuries to personnel in the vicinity.

Despite precautionary measures taken by manufacturers, occasional wheel bursts or breaks still occur.

a. Ring testing: A new wheel will be checked for cracks by tapping it with a wooden mallet. A faultless vitrified wheel will give a clear ring, an organic bonded wheel a less ringing tone. Both can be differentiated from the cracked sound of a defective wheel. When in doubt, do not use the wheel without having it checked by the supplier or other knowledgeable person.

b. Testing: Before putting a new wheel into service, check to ensure the rating of the wheel is the same or greater than the rating of the grinder. All new wheels are marked with the maximum operating RPM. If the wheel does not have a rating label attached, or you do not know the maximum operating RPM of the grinder, do not use them. The wheel will be tested at maximum operating speed while exercising due caution.

E. HAND AND PORTABLE POWER TOOLS.

1. Each employer is responsible for the safe condition of the tools and equipment used by employees, including tools and equipment which may be furnished by the employees.

2. It is important to have on hand only those tools and equipment that will be needed to do the job. It is even more important to ensure those tools and equipment is in serviceable condition. Common things to look for with hand tools are:

a. Hammers with broken or cracked handles.
b. Chisels and punches with mushroomed heads.
c. Bent or broken wrenches.

3. Most hand-held power tools will be equipped with a dead-man or quick release control so that the power is automatically shut off whenever the operator releases the control.

4. All hand-held portable electrical equipment must be grounded or double-insulated, identified as such and plugged into an approved (GFCI) electrical circuit.

F. LADDERS

1. Ladders must be inspected on a set schedule. Any ladder which cannot be repaired must be replaced. All unserviceable ladders will be disposed of following the local installation’s instructions.

2. Some suggested ladder inspection items:

a. Loose rungs, nails, screws, bolts, or other metal parts.
b. Cracked or split uprights and rungs. Wooden ladders will not be painted.
c. Broken or missing locks or defective rope on extension ladders.
d. Broken or missing hinge spreaders on stepladders.
e. Proper safety feet on the base of the ladder?

3. When using a ladder:

a. Never use a metal ladder near electrical equipment or circuits.
b. Never place a ladder in front of a door without locking or guarding the door.

c. Place the ladder with the base one-fourth the length of the ladder away from the building or structure.

d. Place the ladder on a level, substantial, non-moveable base.

e. When climbing or descending, face the ladder and use both hands. Wear shoes with heels. Don't carry material up or down the ladder.

f. When working from a portable ladder, don't reach out too far. Move the ladder.

g. Never climb to the top step of a portable ladder or place feet on the brace portion.

G. **SHEARS.** All shears will have guards that prevent the operator from having any part of their body in the danger zone during the operating cycle. They will also have hold down device(s) to keep the material from moving during the operating cycle. Shears without these safeguards will not be used.

H. **TORCH CUTTING**

1. When cutting involves coating, fluxes, or base metals containing elements such as zinc, fluorine, beryllium, lead, or cadmium, and their compounds, breathing the vapors and fumes generated can be hazardous. The area must be adequately ventilated. Outdoor cutting involving lead, mercury, and cadmium requires the workers wear respiratory protective equipment. An appropriate respirator will be provided, based on an industrial hygiene survey. Whenever respirators are used the DRMO must also have a written respiratory SOP. See chapter II, paragraph D. For torch-cutting operations a written fire safety SOP is required. See Enclosure 3.

2. Polyvinyl chloride (PVC) coated material: PVC plastic coated wiring is frequently installed in electrical and electronic equipment. Torch cutting of this type of wiring can release dangerous levels of hydrogen chloride gas. When demilitarization of such equipment is required, use mechanical methods instead of torch cutting.

3. Prior to any torch cutting, either by a contractor or by DRMO employees, the DRMO is to consult with their host fire marshal and abide by any rules pertaining to a fire watch.

I. **VIDEO DISPLAY TERMINALS (VDTs).** When installing VDT keep in mind the following points:

1. Keyboard should be elbow high. A ledge under the keyboard will provide support.

2. Copy holders should be place near the screen to reduce visual search.

3. Leg room should be sufficient to allow feet to be flat on the floor with the knees at a 90 degree angle. Footrests should be provided if needed.

4. Chairs should have adjustable seat height, arm rest and back rest to support the lumbar region (lower back).

5. Eliminate high contrast variation between screen and hard copy. Generally the lowest lighting at which the operator can comfortable read the hard copy is better than bright light. Screen luminance should be kept low to minimize reflected glare. Do not place the VDT in front of a window. Screens should be cleaned frequently to reduce dust accumulation that causes glare.

6. The top of the VDT should be at or below eye level.

CHAPTER IV – DRMO OPERATIONS

A. CARBON MONOXIDE. Carbon monoxide is an extremely toxic colorless and odorless gas. Its principal source is from internal combustion, engine exhausts, e.g., automobiles, forklifts, and tugs, and poorly vented or improperly adjusted gas, coal, or oil space heaters. Since its threshold limit value is 50 parts per million (PPM), and this is only measurable with safety engineering detection equipment, the following precautions will be employed:

1. When powered material handling equipment (PMHE) is used inside warehouses and storage buildings the following selection criteria will apply. First; battery operated, second; diesel, last LPG/gasoline. When LPG/gasoline PMHE is used operating perimeters will be based on a survey conducted by a certified IH.

2. Request a survey to check carbon monoxide levels in buildings with poor ventilation on a regular schedule particularly when windows and doors are closed due to climatic conditions.

3. If carbon monoxide in excess of 50 PPM is detected in any building, the building must be evacuated. DRMO personnel will not be permitted back inside until the source of the carbon monoxide is found and corrected.

B. COLD WEATHER WORK

1. Exposure to cold weather can cause the following:

a. Frostbite – Crystallization of tissue fluids in the skin or subcutaneous tissues. Caused by prolonged exposures to cold and usually wetness of temperatures just above freezing to about 50 degrees F. Edema, tingling, itching, and severe pain may occur, followed by blistering and ulceration.
b. Chilblains – An inflammatory swelling or sore produced by exposure of the feet or hands to cold.
c. Raynaud's disease – Repeated exposure to cold and prolonged vibrating (as in the use of hand tools) resulting in numbness and blanching of the fingers with loss of muscular control.
d. Dry skin – Conditions resulting from repeated exposures to dry cold weather.
e. Hypothermia – Rapid, progressive mental and physical collapse that accompanies the chilling of the inner core of the body. First symptom is generally shivering.

2. Personnel will not be exposed to cold weather conditions which exceed the following:

Temperature Range	Maximum Daily Exposure
30 F to 0 F	No exposure limit if employee is Properly clothed and dry.
0 F to –30 F	Total exposure of 4 hours alternating 1 hour exposed, 1 hour protected
-30 F to –70 F	Two periods of 30 minutes each at Least 4 hours apart.

-70 F to -100 F	Totals of 5 minutes when Wearing completely enclosed headgear With body heated breathing tube.

3. When determining the temperature to which employees are exposed, ambient temperatures will be converted to equivalent wind chill temperatures as shown in the wind chill chart at Enclosure 1.

C. ELECTROLYTIC SILVER RECOVERY

1. Electrolytic silver recovery units with open surface tanks can produce hazardous airborne mists. These units should be equipped with lateral exhaust ventilation hoods.

2. The ventilation system must exhaust to outside the work area.

D. FUNCTIONAL TESTING OF EXCESS/SURPLUS PROPERTY. The following procedures, when used, will permit the testing of certain items with a reasonable level of safety:

1. Functional testing of property is limited to common type items such as vehicles, office machines, household/kitchen appliances, hand tools, floor polishers, vacuum cleaners, etc.

2. Items with Supply Condition Code "F" and Disposal Code "9" or better may be tested. Items with Supply Code G, H, or S or Disposal Code S or X will not be tested.

3. Items with obvious defects such as broken or frayed wires, loose attachments, broken or cracked guards, will not be tested.

4. No one will alter an item to allow it to be tested. This includes DRMO employees and customers.

5. DRMO escort personnel will be present when customers are conducting the tests to ensure safety procedures are followed.

6. The testing of items must be done in areas which have been determined by DRMS and/or host activity safety personnel to be safe for the type of testing being conducted.

7. Electrical items will only be allowed to be plugged into a 15 amp GFCI equipped circuit.

E. HOUSEKEEPING

1. Good housekeeping is important to mishap prevention. It has been proven that good housekeeping is accompanied by low mishap rates. Good housekeeping also improves morale.

2. These are examples of poor housekeeping and their mishap potential:

a. Loose objects on the floor and stairs – tripping hazards.
b. Slippery material on the floor and stairs – slips and falls.
c. Loose objects overhead – may fall on people below.

d. Large objects out of place – may be struck by employees.
e. Protruding nails – may puncture or scratch.
f. Collection of rubbish or trash or hazardous materials – fire.

3. Good housekeeping must be a part of any plan of operation. It must also be part of an individual's job responsibility.

F. MANUAL HANDLING OF PROPERTY

1. The preferred method for the manual movement of large, heavy, cumbersome, or rough material is by PMHE. Only as a last resort should two or more employees are used.

2. Any property which exceeds 50 pounds or is not easily handled by one person will be moved or lifted by means of PMHE or by two or more employees. The maximum lifting limit per person is 50 pounds.

G. OUT-LOADING AND OFF-LOADING PROPERTY

1. It is a DRMS policy that DRMOs will out-load property for customers as a condition of sale when the following conditions are met:

a. Availability of PMHE of the right type and size to safely lift and load the property onto the customer's vehicle.
b. Availability of trained and licensed PMHE operators.
c. Availability of proper terrain at the out-loading locations.

2. The personnel protective equipment, and personnel certified in its use necessary to handle hazardous or toxic materials.

3. DRMO employees will not climb or stand on customer's vehicles during out-loading or off-loading operations. Forklifts may be driven onto vehicles/trucks provided the floor is smooth, free of debris, and strong enough to support the weight of the forklift and its load. During all loading operations, the wheels of the must be chocked.

4. During off-loading and out-loading vehicles will have the motor off, parking brake set, wheels chocked and personnel will not be allowed in or on the vehicles.
5. During the tailgate loading process, an observer/spotter must be used to ensure that no damage results in the process. The observer/spotter should be a government employee.

6. Off loading Material Using Two Fork Lift Trucks.

a. It is important that DRMOs always use the correct equipment to perform the job. There are times when MHE operators must off-load outsized equipment such as lathes and even 5 ton trucks. Every effort must be made to schedule receipts of this type of material to ensure that the proper equipment can be obtained either from the host or rented. There are emergencies which sometime override this. Should outsized material arrive at the DRMO, and there is no other means of obtaining the proper equipment, the supervisor or lead worker should perform a job hazard analyses. This should include a discussion with everyone involved in the procedure, including the truck operator. The supervisor will take the lead in the entire procedure, including initialing the forklift equipment maintenance checklist, to ensure the forklifts being used are

heavy enough and in good operating condition. The supervisor will act as the spotter and ensure that radio or good communications exist between all parties, including the truck driver. The guidance written below only serves as a starting point. Each offload is different and must be thoroughly planned prior to work. This is because all loads vary is size, shape, weight, and even height and width.

1. Make sure the truck is parked on the flattest level possible. Do not attempt to unload if there are any pot holes, cracks, large stones, or other obstacles in the immediate area.
2. Perform the job or offload in a well lighted area.
3. Clear out ice, snow, or anything which could cause slipping.
4. Ensure good communication is maintained between all parties.
5. Thoroughly inspect the incoming documentation for weight and balance.
6. Off-load under full sight of the observer/spotter. Spot the truck away from the glare of the sun.
7. Ensure you have the proper size forklift. Remember, if you are lifting 8,000 lbs; do not select two 4,000 lb forklifts. Select two 10,000 lb. Forklifts.
8. Inspect the material you will be offloading for Center of Gravity Markings. Talk with the truck driver and obtain any information you can.
9. Forklifts being used must have up to date load mast information printed on the mast.
10. The drivers will engage, and slowly lift, until the material is slightly raised. The spotter and the drivers will determine if the lift is secure.
11. If secure, the spotter will direct the forklift operators to continue the lift and direct the truck driver to move out.
12. The spotter will initiate action to slowly lower the load to the ground.
13. Never, never use any forklift attachments, ever.

H. PROPERTY STORED ABOVE EYE LEVEL

1. It is frequently necessary at DRMOs to store and stack property through the use of approved storage racks or storage aids, sometimes three or four pallets high.

2. (29) CFR 1910.29 requires the use of mobile work platforms or mobile ladder stands in these situations. This equipment is usually made of tubular welded frames with wheels or casters for ease or movement.

3. Extension ladders are not authorized for access to property stored above eye level.

I. RECONTAINERIZATION/OVERPACKING OF CHEMICALS, PESTICIDES, OR OTHER HAZARDOUS MATERIAL

1. Generally, recontainerization/overpacking of chemicals will not be performed by DRMO personnel. Such work is accomplished by host installation or service contractor personnel who have been specially trained and have the equipment necessary to perform the work in a safe manner.

2. Should it become necessary for a DRMO to recontainerize or overpack pesticides, chemicals or other dangerous material the DRMS safety and health office will be contacted. PPE requirements will be determined on a case-by-case basis by the DRMS safety and health manager.

3. Additional guidance on over packing and spill procedures are contained in DRMS-I 6050.1, Instructions for Environmental Compliance for the DRMS Hazardous Property Program.

J. **REMOTE OPERATIONS.**

1. Remote operations can develop medical emergencies and injuries requiring immediate medical attention to preserve life. Precautionary measures will be instituted for remote operations in any of the following work environments:

a. DRMO facility having remote or isolated work areas.
b. RIPL work-site occupied full-time by DRMS personnel.
c. RIPL work-site occupied part-time by DRMS personnel.

2. When workload permits, two or more employees will be dispatched to these work-sites. When two or more employees cannot be sent, at least one of the following control mechanisms must be implemented in order to protect the single employee:

a. The employee will contact their supervisor upon arrival at the remote work-site, and hourly thereafter. This may be accomplished by telephone or portable communication equipment.
b. A procedure will be established by the supervisor to ensure the employee's whereabouts are checked hourly throughout the day. This may be accomplished with the assistance of the host installation or portable communication equipment.

3. Under most circumstances, a single employee shall not be permitted to perform any work considered hazardous or dangerous. Such operations include, but are not limited to, the use of MHE, cranes, shears, balers, shredders, strippers, torch cutting and sites that have physical custody of hazardous property. Only in the case of adverse mission impact can a single employee be permitted to perform basic loading and unloading of a customer's conveyance. In this instance, the following conditions must be met prior to work commencing:

a. A second DoD employee (designated host installation personnel, etc.) agrees to act as the "2nd man" or spotter. This requires the single DRMS employee to provide the DoD employee local orientation training to include locating and operating emergency communication equipment and a general review of contingency procedures. Additionally, the DoD employee must commit to remain visibly present and remain an active observer.
b. The single DRMS employee must not stage property to be loaded unless the designated spotter is present.
c. The single DRMS employee must place off-loaded property directly into location while being observed by the designated spotter. (This removes the temptation to move the property after the spotter has departed.)

K. THERMAL STRESS

1. Prolonged exposure to working environments in a high temperature atmosphere can produce the following adverse conditions:

a. Heat cramps usually occur in employees who are exposed to prolonged high temperature and who drink great amounts of water. Excessive sweating occurs and the body is depleted of its normal salt supply. Heat cramps in a person result in severe muscle cramps in an abdomen and legs, faintness, dizziness, and exhaustion.

b. Heat exhaustion is characterized by excessive pooling of blood in the vessels of the skin from the body's effort to lose heat. In case of heat exhaustion the employee may feel weak and nauseated; the employee's skin is pale and clammy. These symptoms are usually accompanied by considerable perspiration and faintness. The body temperature is usually normal, or slightly above normal. Vomiting may occur, but unconsciousness is rare.

c. Heat stroke (sun stroke) is the most severe of the heat related conditions. Heat stroke is not necessarily the result of exposure to the sun, although it occurs more frequently on hot humid days. Physical exertion is a contributing factor. Heat stroke results from a disturbance of the body's heat regulating mechanism and cessation of sweating. This in turn causes a very high fever and often collapses. The body temperature will often rise to 105 or 106 degrees F, and this factor alone makes heat stroke a dangerous situation. Other symptoms include dry, red, hot skin and rapid strong pulse. The employee may be in convulsions or be unconscious.

2. Control of the physical working environment is the first consideration to be given to the effort to control exposure to excessive heat. This control can be best accomplished by engineering methodology such as improved ventilation and more effective cooling systems. Modification of work patterns is another effective means to control exposure to excessive heat. For example, work normally accomplished in the afternoon in areas of excessive heat will be scheduled in the morning, when the temperature is cooler. In areas where there are normally extended period of time of high temperatures the DRMO may provide their employees with ice and chilled drinking water.

L. WAREHOUSE FLOOR MARKINGS. Guidance for floor markings can be found in (OSHA) requirements. Repainting of floor merely to achieve compliance is not necessary. When floor markings become worn or deteriorated or are no longer readily identifiable, they will be repainted following the above (OSHA) guidance.

M. FACILITY INSPECTIONS. DRMOs are required to schedule the following safety and industrial hygiene inspections as stipulated in their Interservice Support Agreement (ISA) with the host:

1. **Safety Inspections.** A professional Safety or Industrial Hygienist must conduct a comprehensive safety inspection of the DRMO annually. A DLA safety and Industrial Hygiene Inspection must be conducted bi-annually.

2. **A comprehensive industrial hygiene inspection of the DRMO must be conducted annually.** If the host industrial hygienist determines an annual inspection is not required, the DRMO may submit a waiver to DRMS-DDS (Enclosure 4). The industrial hygienist must indicate the frequency of surveys and the reasons for performing other than annually. The industrial hygienist and the Chief/Site Manager must sign the waiver indicating that the industrial hygienist will immediately review any personnel change, equipment change or process change.

3. **DRMOs must ensure that quarterly radiation surveys are conducted by the host Radiation Protection Officer (RPO).** These surveys are to include shipping and receiving areas; DEMIL areas; and the scrap yard. Any radioactive materials identified during these surveys are the disposal responsibility of the host.

4. **DRMOs are required to conduct a monthly walk-around safety self-assessment and record the results on the DRMS Worksite Checklist DRMS Form 2000.** Completed checklists are to be maintained in file at the DRMO.

5. **Copies of the host inspection reports will be forwarded to DRMS-DDS for review. The DRMO is responsible to correct all deficiencies identified during these inspections.**

Entire Paragraph Revised August 11, 2005

N. **CONTRACTORS.** All contractors, having a contract with the government are responsible for the safety and health of their employees and the protection of the public at contractor and government facilities. The following policy is applicable to those DRMS contractors directly supporting receiving, storage, RTDS and disposal functions, and not support services contractors such as janitorial and copier maintenance. Contracts may have the contractor operating government furnished equipment (GFE) and using government furnished facilities (GFF). It should be noted that GFE/GFF are occasionally shared with government employees. Government representatives, i.e., CORs/COTRs/QAEs/Safety and sales (scrap/commercial) liaisons conduct surveillance, inspections, etc., when managing or monitoring our various partner's performance. If any government employee uses any GFE, they also must follow and ensure compliance on the following DRMS Safety and Occupational Health (SOH) program guidelines:

1. **Contractors performing on a DoD installation.** a. Most contracts have provisions that require the contractor to comply with all Federal, State, local, host nation, and installation safety and health regulations. During the transition or phase-in period of a new contract, DRMOs are required to provide the contractor's management team with a DRMS Safety and Health overview. This overview will include:
    - Safety and Health related contract clauses.
    - Site specific contingency and emergency procedures.
    - Local GFE and GFF storage.
    - Operational and maintenance equipment requirements.
    - Any other specific host safety and health requirements.
    - A reciprocal review of the contractor's safety program to include Hazardous Communication Program (HCP), Material Handling Equipment Program, Personal Protective Equipment Program, and any of the programs listed below. (Note: the contractor is required to have a written Hazardous Communication Program if they manage any DoD chemical or introduce any of their own chemicals into the workplace).
    - The overview of the contractor safety program should directly correlate with the nature and scope of the contract.

    b. Should any government representative (i.e., CORs/COTRs/QAEs/Sales Liason, etc., need safety assistance, the DES Battle Creek Safety and Health Office may be contacted.

    c. The government representatives will document the reciprocal overviews by preparing a Memorandum of Record (MFR) for the contract file. The contracting officer (KO) or contracting officer equivalent (KOE) will be contacted immediately if there are any issues that cannot be addressed at the local level. If issues involve the Safety and Health of government employees, DES Battle Creek Safety and Health Office should be notified in addition to the KO/KOE.

    d. During the course of the contract, Government representatives are responsible for monitoring the contractor's safety performance as

directed by the KO/KOE. (A reference sheet is provided at enclosure 5).

e. The DRMO Safety Monitor may assist, as necessary. At a minimum, if applicable, the contractor should have the following safety programs filed and maintained by their management at the DRMO:

1. **Material Handling Equipment Program.** All contract employees working on a government installation should have updated Material Handling Certification (training). Prior to operating any government forklift or material handling equipment, the contractor employee must be thoroughly trained IAW 29 CFR 1910.178 and show proof of certification. The MHE program should also include proper procedure for daily examination of MHE, proper reporting of damaged equipment, or equipment in need of repair.

2. **Hazardous Communication Program.** All contractors are required to have a company Hazardous Communication Program. The program should address the hazardous communication Standard as written in 29 CFR 1910.1200. Depending upon the contract, it should include all chemicals used or handled in the workplace (hazardous materials and job oriented chemicals). The contractor and the government representative will review and acknowledge the training/receipt of their respective programs, obtain a copy of the Hazardous Communication Plan and place it on file at the DRMO.

3. **Personal Protective Equipment Program.** The contractor will ensure that a Personal Protective Equipment Program is in place for all contract employees. Copies of their Personal Protective Equipment Certification forms must be maintained at the place of work.

4. **Respirator Program.** Any contractor engaged in Metal Burning, Torch Cutting, or any activity requiring the use of a respirator (or dust mask) at the DRMO, will ensure a copy of their Respirator Program is maintained by their management, and kept at the DRMO. The respirator program will include the name(s) of the contractor individuals that are respirator certified.

5. **Accident Prevention Plan.** A copy or description of the contractor's Accident Prevention Plan must be maintained at the DRMO. This will include accident reporting procedures and accident investigation forms. Copies of all accident mishaps will be provided to the COR/COTR and forwarded to DES Safety and Health Office in Battle Creek.

6. **CPR/Emergency Plan.** A copy of the contractor CPR/Emergency Evacuation Plan will be filed and maintained at the DRMO. Should contractor's work at Hazardous Waste Storage Facilities, the government will provide emergency plans.

7. **Fire Watch/Fire Extinguisher.** If host requirements include a fire watch when burning or torch cutting, the contractor will provide a copy of their fire watch plan. The contractor will abide by all rules pertaining to the host fire marshal.

8. **Safety Inspections.** DRMS-DES safety inspectors will periodically inspect all contract work areas and safety programs. DES reserves the right to inspect, without prior notice. This is to ensure contractor operations meet the standards of the contract, OSHA, host, and DRMS Standards of Safety. **The contractor will conduct monthly walk around safety inspections of their work area and equipment.** Copies of these self-inspections will be provided to the COR/COTR, upon request. Any safety problems associated with the self inspection will be addressed by the COR/COTR.

9. **Industrial Hygiene Program.** A copy of the contractor Industrial Hygiene Program will be kept at the DRMO. The plan should reflect the site operation, and address all possible Occupational Health exposures.

10. **Hearing Protection Program.** A copy of the contractor's Hearing Protection Program must be kept at the DRMO. This will include noise samples, hearing tests, etc.

2. **DRMS personnel working at contractor facilities**. Again, each contract has provisions that require the contractor to comply with all Federal, State, local and host nation safety and health regulations. Other than DRMS-DES Safety professionals, DRMS personnel are at the contractor's facility to evaluate or monitor the contractor's performance with regards to the contract (demilitarization, demanufacturing, HM/HW recycling and disposal, etc.). The focus of this portion of the DRMS SOH Program is to protect the safety and health of the DRMS personnel entering and working at the contractor's facility. Accordingly, DRMS personnel should anticipate the contractor providing a safety overview if there are any hazards present. If the contractor declines to provide a safety overview and the COR/COTR feels there are hazards present, the matter shall be elevated to the Contracting Officer. At a minimum, the overview should include a review of the hazards present; site-specific contingency and emergency procedures; personal protective equipment (PPE) availability and usage; and the contractor's HCP, if applicable. (Generally, the contractor would be required to have a written HCP if they have employees and any chemicals present in the workplace). The COR/COTR shall document the overview by preparing a MFR for the COR/COTR file. The MFR shall identify the workplace(s) evaluated, date, and DRMS employees present, name and title of contractor representative providing the overview, and a summary of the overview content. A brief description of the overview should be forwarded to the DRMS-DES Safety and Health Office for review.

(Note: OCONUS DRMS personnel shall coordinate with the DLA Europe/Pacific safety office to determine what host nation requirements are applicable and for translation assistance, where necessary.)

The supervisor or site leader of an employee working at a contractor facility shall be trained and shall provide for the employee's safety just the same as at a DRMO/RIPL worksite:

(1) Ensure the pertinent aspects of the safety overview at the Contractors facility are documented. Note: Contractor facilities require various degrees of attendance by DRMS/DRMO personnel. Supervisors or site leaders must ensure that the employee is protected from all contractor operations (hazards). Contractors may be engaged in multiple operations, so it is important that any possible hazards, exposures, etc., are

properly written into the COR/COTR Personal Protective Equipment Certification.

(2) Sites with multiple industrial operations, or areas where DRMS employees are present for long periods of time; should be inspected prior to work assignment by a DRMS/DLA Safety and Industrial Hygiene professional. All hazards and correct Personal Protective Equipment can be determined with the assistance of the contractor safety department.

(3) Ensure that where PPE is required, it is provided at DRMS expense. Additionally, employees shall be trained on the proper use and care of PPE. The supervisor or site leader will certify in writing that the employee received and understood the required training, with the name of each employee trained, date of training, and the subject of certification. This can be done by using the Personal Protective Certification Form in Enclosure 6.

(4) Should any employees working at a contractor facility feel that an occupational hazard could affect their health and safety; they should immediately contact their Contracting Officer or DRMS-DES Safety and Health Office.

(5) Inspections of off-site contract facilities will be made by DRMS-DES Safety and Health Office.

(Note: PPE and Hazard Assessment certifications forms can be found on the DRMS Safety and Health web page.)

8. **Temporary Employees.** Temporary employees are hired to work throughout the DRMO, usually for short periods of time. They may be driving forklifts, working in the warehouse, working in the demil center, or sorting material in the yard. Because they are working at the DRMO, the DRMO is responsible to ensure they are wearing the correct Personal Protective Equipment for the job. Enclosure 2 of this manual, advises the correct PPE for the various hazards at the DRMO.

a. **Reporting for Work.** Temporary employees should report to work wearing steel toed shoes. Prior to contracting or hiring the temp, the supervisor could request the temp to also wear Safety Glasses or ANSI approved prescription Safety glasses. If you require this, then it is your obligation to ensure that these glasses are ANSI approved. ANSI approved safety glasses have a clear ANSI stamp on the inside of the frames. If the employee reports to work without safety glasses, the DRMO should provide safety goggles, making sure the employee wears them. Safety helmets should also be provided to the temp by the DRMO. Any other PPE should be provided in accordance with enclosure 2. Some of the PPE requirements are:

1. **MHE.** Ensure the temp has forklift training prior to reporting to work. The training/certification should be done by attendance at an 8 hour MHE course. The supervisor should photocopy this certification and maintain the record while the employee is working at the DRMO. The DRMO is then required to provide the temp with forklift familiarization. This is a brief walk around of the MHE

that the temp will be operating, to include proper completion of the Operator Daily Checklist. The supervisor will record this training and maintain the records at the DRMO. The temp is allowed to operate any DRMO MHE equipment provided they are given a short familiarization course on MHE fundamentals pertaining to the forklift they will be using.

2. **Warehouse**. The temp should arrive to work wearing safety toed shoes, and or safety glasses. Otherwise, the DRMO must provide glasses or goggles in every phase of warehouse work. Should the temp be sorting material, then appropriate gloves should be provided.
3. **Demil**. Care should be taken where the temp is working. If the area requires respirator use, then one must be provided. Appropriate respirator training and proper fitting must also be given. If your temp will be doing cutting, then all chaps, leather, helmets, etc., must be provided. Any hazards associated with the cutting process must be thoroughly explained to the worker.
4. **Hearing Protection.** Hearing protection must be given to the temp and the temp has to be advised of all areas where they are to be worn. The temp should be shown how to properly wear the ear plugs.

b. Temporary employees are required to wear any Personal Protective Equipment that your DRMO employee wears. It is always good advice that you take a Personal Protective Equipment Form and complete it for the temporary worker. Have them sign the form indicating they understand what the PPE is, how to wear or don the PPE, why and where they are wearing it.

9. Mishap Reporting.

a. Temporary Employees. Mishaps incurred by contractor employees who are supervised on a day-to-day basis should be recorded on the DLA Form 1591 (Chapter VI). Contractor employee mishaps are reported on DLA records if the contract employee is supervised on a day-to-day basis. An example of this would be an INS employee. OSHA Compliance Directive CPL 2-0.131, "Frequently Asked Questions" #31 defines "supervised" as "Day-to-day" supervision occurs when in addition to specifying the output, product or result to be accomplished by the person's work, the employer supervises the details, means, methods and processes by which the work is to be accomplished".

b. **Contractors.** Non supervised contractors (RV, GL, SV, etc.) involved in a mishap are not required to submit mishap reports, except under the following conditions:

1. **Government Property Damage.** A non supervised contractor damaging government property or facilities during the course of operation.
2. **Government Equipment Damage.** A non supervised contractor damaging government equipment during the course of operation.

In each condition above the DLA Form 1591 must be completed and submitted to Headquarters, Safety, Battle Creek, within 6 days of incident. Should a non supervised contractor become involved in a mishap without damage to government equipment or facilities, the COR/COTR or DRMO Chief could obtain and forward a copy of the contractor's mishap report to Headquarters, Safety, Battle Creek.

Temporary Worker/Contractor Safety Checklist

1. Temporary Workers

☐ Report to Work with Safety toed Shoes.

☐ Personal Protective Equipment Certification Form
- ☐ Includes walk around of work area
- ☐ Includes identification of all work hazards
- ☐ Includes instruction on usage of PPE☐
- ☐ Provide training In Hazardous Communication.
- ☐ Location of Fire extinguishers
- ☐ Emergency evacuation procedures.
- ☐ Emergency Medical procedures.

☐ Does temp have ANSI approved Safety Glasses?
- ☐ Provide safety goggles, if necessary.

☐ Provide Temp with Hearing Protection

☐ Provide temp with gloves, if necessary.
- ☐ Provide temp with hard hat.

☐ Will Temp operate MHE equipment?
- ☐ Ensure temp has proper MHE certification.
- ☐ Provide short course on Fundamentals of MHE.
- ☐ Operator Daily Checklist.
- ☐ Unique safety hazards associated with DRMO.
- ☐ Battery charging procedures/PPE, etc.

☐ Will temp be handling hazardous materials?
- ☐ Hazardous materials course.
- ☐ Haz Com Training.

☐ Will Temp be working in the warehouse?
- ☐ Safety Glasses/goggles, gloves
- ☐ Portable ladders
- ☐ Fire extinguishers
- ☐ Emergency evacuation

☐ Will temp be working in the yard?
- ☐ Steel toed shoes
- ☐ glasses/goggles
- ☐ Hearing protection
- ☐ Dust masks

☐ Will temp be working with demil?
- ☐ Respirator training/respirators
- ☐ leathers, masks, cutting protection.
- ☐ Hearing protection/shoes/goggles.
- ☐ Fire protection/evacuation

Contractor Safety On-Site Checklist

☐ Contractor Hazardous Communication Program
  ☐ DRMO Hazardous communication Program

☐ MHE Program
  ☐ Forklift Certification
  ☐ Annual Crane Certification
  ☐ MHE fundamentals and orientation
  ☐ Operator Daily checklist

☐ Mishap Reporting Program

☐ Industrial Hygiene Program

☐ Respirator Program

☐ Walk around safety inspection Program

☐ Personal Protective Equipment Certification

☐ Emergency Evacuation Program

☐ Hearing Conservation Program

Contractor Safety Off-Site Checklist

☐ Have you reviewed the Haz Com Program?

☐ has the company shared their safety program?

☐ has the company advised you of their PPE Program?

☐ Do you have Safety Toed Shoes?

☐ Do you have your safety helmet?

☐ What are the Industrial Noise levels?
- Contact SOHO Safety Office

☐ Do you have the correct Hearing Protection?
- Contact SOHO Safety Office

☐ Is the Work Area Dusty/Smoky?
- Contact SOHO Safety Office

☐ Radioactive Material?
- Contact SOHO Safety Office

☐ Driving MHE? Had Training?

☐ Handling Boxes? Proper Gloves.

☐ Safety Glasses/Goggles. Wear them!

☐ Working Outdoors? Foul Weather Gear.

☐ Working Alone? Remote communications.

CHAPTER V – STORAGE AND HANDLING

A. AMMUNITION, EXPLOSIVES, AND DANGEROUS ARTICLES (AEDA). Although physical custody of AEDA by a DRMO is prohibited, occasionally items of this nature are mixed with items turned in for disposal. The DEMIL safety and reporting procedures of DRMS-I 4160.14, Volume VII, should be reviewed prior to and complied with during any DEMIL operation. Some DRMOs have used ammunition and artillery items as office displays, paper weights and door stops. The use of munitions list items (MLIs) for these purposes is not permitted. Even categories III, IV, and V items that have been certified as "inert" must be demilitarized according to the provision of DoD 4160.21-M-1.

B. BATTERIES.

1. Batteries turned into the DRMO as receipts will be drained of all fluids and properly palletized, using plastic banding. Whenever possible, batteries will have a cover over the anodes and cathodes to prevent any cross sparking. DRMO personnel handling batteries shall wear proper PPE to include splash-proof goggles, face shield, acid proof gloves, aprons, boots, and battery carriers. Emergency eyewash and showers will be available near the battery storage areas. Batteries will be stored sealed and in the upright position, protected from physical damage.

MHE batteries will be charged while remaining on the equipment. Proper charging areas will be designated; marked and appropriate battery charging equipment will be used. Barriers will be placed around the battery charging equipment to prevent damage by the MHE. Personal Protective Equipment will include all in (1 above) and be placed neatly in the immediate area of the battery chargers. DRMO personnel will never remove and replace MHE batteries. There will be no storage of receipts in the battery charging area.

C. CHEMICAL COMPATIBILITY. Extreme care must be exercised in the storage, and/or handling of chemicals. For DRMS policy on storage compatibility, refer to DRMS-I 6050.1, chapter III, Storage.

D. COMPRESSED GAS CYLINDERS.

1. Compressed gas cylinders, will not have owner markings obliterated, torch cut, mutilated, or crushed by DRMO personnel. Residual amounts of gas could remain in these cylinders and can be very dangerous.

2. Although compressed gas cylinders may be listed as being "empty" when they are received at the DRMO, they must be handled and stored and "full" cylinders. Valve protection caps, where cylinders are designed to accept caps, must be in place. If the cylinder(s) have been devalved or have visible holes they can be considered empty. Oxygen cylinders in storage must be separated from fuel cylinders.

3. Consult MIL-STD-101, Color Code for Pipelines and for Compressed Gas Cylinders and DLAI 4145.25, Storage and Handling of Liquefied and Gaseous Compressed Gasses and Their Full and Empty Cylinders, for additional information.

4. When received as scrap as outlined in DRMS-I 4160.14, local storage procedures will apply.

E. DRUM STORAGE.

1. DRMO management should follow the guidance provided by local laws and ordinances when dealing with the storage of used and filled drums. Empty drum storage is left to the discretion of the DRMO chief with such factors as climate, space, environmental and security being considered.

F. FLUORESCENT LAMP TUBES. Fluorescent lamp tubes contain small amounts of liquid metallic mercury. They must be handled and stored with great care to prevent breakage and escape of the mercury.

G. FUEL CELLS/TANKS.

1. Empty fuel cells and tanks must be handled with caution. Stored fuel cells and tanks containing residual fuels will be separated from other combustible materials and sources of fire. Stack size will be limited to ensure stability of each stack and separated for easy access of fire fighting equipment to all portions of the stacking area.

2. Vehicles may be handled and stored with fuel in their tanks unless their fuel tanks are leaking, in which case they must be drained and/or repaired by host installation maintenance before turn-in to the DRMO. Spilled fuel must be reported to the host installation fire department as soon as possible.

H. ORGANIC/INORGANIC PEROXIDE AND ETHER CHEMICALS.

1. Organic and inorganic peroxide are strong oxidizers and will cause spontaneous combustion when brought into contact with combustible and metallic substances. Organic peroxides are also heat and shock sensitive. Even the more commonly known hydrogen peroxide (obtainable at most drug stores in weak concentrations) exhibits these same characteristics.

2. As these peroxide chemicals age, many decompose into substances that are heat and shock sensitive and can explode. Additionally, most ethers such as ethyl, benzyl, isopropyl, and butyl ether, dioxane and tetrahydrofuran will, upon exposure to air, combine with oxygen to form peroxides that can detonate.

3. This family of chemicals can become very dangerous to handle and must be treated with great care and caution. Organic peroxides, ether, and partially used containers of either will be destroyed by Explosive Ordnance Disposal (EOD) personnel due to age and the danger of explosion.

4. DRMS will not accept custody of these items because of their high potential for spontaneous combustion and explosion. However, if through error such items are received, the above listed cautions will be observed. If assistance is needed call the host or DRMO Industrial Hygienists.

5. Organic peroxides are considered to be carbon-based chemicals that contain the characteristic peroxide oxygen-oxygen bond. The primary types of peroxides that could be stored at some DRMOs are hydro peroxides (R-O-O-H) and dialkyl peroxides (R1-O-O-R2), where the R1 and the R2 are alkyl moieties. There are some other types of peroxides that have been identified, such as akyl peroxides, poly peroxides, peroxyesters, alkylidene peroxides, peroxyacids,a and cyclic peroxides.

6. Some organic chemicals, that spontaneously from peroxides by free radical reactions of the hydrocarbon with molecular oxygen during autoxidation, can be

initiated by light or contaminants. Some of the most notorious peroxide formers are: acetyls, certain allylic alkenes, chloro and floroalkenes, dienes, aldehydes, amides, lactams, ureas, some alkylarenes, ketones, vinyl monomers, and some alcohols. The rate of peroxidation is considered to be a function of the parent chemical. The risk of hazardous peroxidation is generally decreased with an increase of the molecular weight of the chemical. Peroxidation can be accelerated by exposure to heat, light, and oxygen, or air.

7. A recommended guidance for the minimum concentration of peroxides in solution on organic chemicals is in the range of 0.005-1.0% as hydrogen peroxide. In most industrial hygiene peroxide programs, a concentration of 100 ppm of peroxides is used as a control point. It has been proposed, from a theoretical perspective, that it should be impossible for most solutions of <1% peroxides to explode. Normally, dilute solutions of peroxidizable chemicals do not usually us a peroxide hazard.

10. Recommendations:

a. If any ether or other volatile peroxide formers are being stored in a refrigerator, it must be spark proof.
b. If there are any questions concerning suspicious organic chemicals or chemicals, in general, the host industrial hygienist must be contacted first.
c. Sealed containers of hazardous materials that have failed the RTDS within the appropriate time, should be disposed as soon as possible, unless assurance that the hazardous material contains no peroxide forming ingredients.
d. If any peroxidizable organic chemicals are received by the DRMO, the containers must be dated when they were received.
e. All peroxide formers (peroxidizable organic chemicals) should be stored in sealed, air-impermeable containers.
f. Diethyl ether should be stored in steel containers because the iron tends to neutralize peroxides.
g. A responsible person should maintain an inventory of peroxidizable chemicals or establish a general chemical inventory to indicate which chemicals are subject to peroxidation.
h. Any chemical with peroxide content of >= 100 ppm should be disposed of.
i. Before the DRMO receives physical custody and accountability of any hazardous material that could be peroxidizable, the receiver must ensure that the host industrial hygienist has certified through any valid peroxide detection method (i.e., iodine detection, ferrous thiocyanate, or redox dip strips), the containers are peroxide free or less than the recommended value.

I. PESTICIDES.

1. Insecticides, fungicides, rodenticides, and herbicides are a class of products all of which are toxic and some are also flammable and/or corrosive. They are divided into four toxicity categories and required to have precautionary statements and labels typically as shown on Enclosure 2.

2. When handling pesticides in toxicity categories I and II, a greater risk is present and the specialized PPE listed in Enclosure 2 is required.

3. Additional guidance relative to pesticides is contained in DRMS-I 6050.1, Chapter XXVI, and DoD 4160.21M

J. RADIOACTIVE PROPERTY. (See also Chapter VI, Radiation Program)

1. Materials containing low level radioactive materials are inadvertently being transported to our DRMOs and consequently, transported to our demanufacturing facilities. In most cases, the outer shipping containers have visible radioactive emblems indicating they contain radioactive sources. The problem becomes even more difficult should any of these items contaminate a smelter. DRMO personnel are neither trained nor qualified to handle low-level radioactive commodities. The following procedures are to be taken when radioactive material is discovered at the DRMO or accidentally transported to a contractor:

a. Ensure your Inter-service Support Agreement includes quarterly radiation inspections by a qualified person from your installation. This is usually your Radiation Protection Officer, Safety manager, or an Industrial Hygienist.
b. Ensure your DRMO receives these quarterly inspections. This may prevent a small piece of radioactive material from becoming a large pile of radioactive scrap, or a smelter full of radioactive steel.
c. Look at the receiving documents closely for any labels, signs, etc., which may indicate low-level radioactive material. Insure the turn-in documents are properly certified.
d. Return any material to the generator flagged by DAISY (or detected) that indicates the material contains radioactive items.
e. File a situation report (SITREP) for any radioactive material inadvertently entering the DRMO. This includes those items returned to the generator. Be able to provide an NSN number, a copy of the1348-1, and if possible, any test results taken by the Radiation Protection Officer.
f. Follow all guidance pertaining to R/T/D and S of radioactive commodities, as written in DLAM 4160.21M.

2. Should Low Level Radioactive Material (LLR) inadvertently be shipped to a contractor facility:

a. Have the COT/COTR of the contractor notify DRMS Safety and Health Office immediately.
b. The COR/COTR will contact the DRMS Safety and Health Office and the SCO for assistance towards determining the health risks of the material. The COR will provide the safety office with the NSN, item description, generating DRMO, and the level of radioactivity.
c. The DRMS Safety and Health Office, in conjunction with the contractor, will determine whether the material is to be returned to the generator, processed or shipped to a disposal site. Any special handling requirements will be determined.
d. If the material is to be returned to the DRMO, the COR will contact the DRMO to determine the correct shipping and labeling instructions.
e. The DRMO will contact the generator to make transportation requirements.

3. **Electron Tubes**.

a. **Items in Serviceable Condition (SCC A-D):**

1. The RPO for the generator is required to make a statement on the DD 1348-1A for all electron tubes IAW DoD 4160.21M, Chapter 4, page 4-21 stating: "These electron tubes contain radioactive material (radioactivity) less than, equal to, in excess of, or unimportant quantities as listed in the 10 CFRF".
2. If the statement has the wording "less than", "equal to" or "unimportant quantities", the DRMO can accept accountability, but not physical custody. The material can then be processed through R/T/D/S. If RTDS fails, the generator must dispose of through their radiation Officer.
3. If the statement has the wording "in excess of", then the DRMO accepts neither accountability or physical custody and the generator must dispose of through the radiation POC. If the generator needs assistance in disposal, they can contact the Safety and Health Office, Headquarters, DRMS.
4. If the electron tube has no radioactivity, the RPO for the generator must certify this on the DD 1348-1A and the DRMO can accept both physical custody and accountability.

B. **Items in Unserviceable Condition (SCC F-H).**

1. The RPO for the generator is required to make a statement of the DD 1348-1A for all electron tube IAW DoD 4160.21M, page 4-21, stating "these tubes contain radioactive material (radioactivity) less than, equal to, in excess or, or unimportant quantities as listed in the 10 CFR".
2. If the statement has the words "less than", "equal to", or "unimportant", or "in excess of", then the DRMO accepts neither accountability nor physical custody and the generator must dispose of through the radiation POC. If the generator needs assistance in disposal, they can contact the Safety and Health Office, Headquarters, DRMS.
3. If the electron tube has no radioactivity, the RPO for the generator must certify this on the DD 1348-1A, and the DRMO can accept both physical custody and accountability for processing to scrap (unless it contains beryllium and needs to be processed as hazardous).
4. If the items contain Beryllium:

a. If beryllium exists, the generator must identify this on the DD Form 1348-1A. If beryllium is present, the item can still be processed in accordance with circumstances 1-3, above. In two or three above, if the item fails RTDS, then,

b. The item will be processed for either demanufacturing or for hazardous waste disposal (funded by the generator).

K. REFRIGERATORS AND FREEZERS.

1. Refrigerators and freezers, stored outside by DRMOs will be stored in a manner which will prevent any possibility of humans becoming trapped inside. Acceptable storage practices include:

a. Taping the lock in a manner to prevent its functioning.

b. Taping a small wooden block along the closing edge of the door or box to prevent the door from closing.

c. Removal of doors or mechanical locking/latching devices.

d. Other appropriate methods that will prevent normal closing and fastening of the door, but will not permanently affect the normal function.

e. Refrigerators and freezers with magnetic closures are exempt from these requirements; however, using one of the methods for storage is still a good practice.

2. Refrigerators and freezers stored in secured buildings are not required to be secured in any special manner.

3. The turn-in procedures, handling procedures, and disposal procedures for Ozone Depleting Substances (ODS) is fully covered in DoD 4160.21M.

L. MONTHLY SAFETY MEETINGS.

1. DRMOs will conduct and document monthly safety meetings. Topics of discussion will be the responsibility of the DRMO Chief or the Safety Monitor. Safety Meetings may be held in conjunction with monthly (or weekly) staff meetings. All safety meetings will be documented using attendance rosters, which include the safety meeting topic. It will be the DRMO Chief's responsibility to ensure attendance of all employees working at the DRMO and their offsite branches.
2. Monthly Safety meetings are mandatory. It provides an opportunity to discuss any safety related matters in an open forum. It should also allow the DRMO Chief or the Safety Monitor time to discuss host related safety requirements or issues presented at their safety meetings.
3. Topics for good safety meetings are located on the DRMS Safety and Health Web page (Safety Smart/Toolbox). Other matters, which would provide good conversation, would be discussion over job performance (hazard assessments), PPE, near misses, and even away from work topics (hiking, biking, etc.)

M. **WALK AROUND AND SAFETY INSPECTIONS.** The safety monitor or DRMO Chief will conduct monthly DRMO facility walk around inspections. The DRMS Form 2000 is a very good reminder as to what to look for. Either the Safety Monitor or the DRMO Chief should sign these inspections. Offsite locations (RPLS, FRAs, etc.) will be included in monthly inspections. The safety monitor or DRMO Chief (or designate), does not have to be a professional to observe and report unsafe working conditions or even unsafe acts. These should be written down, reported and corrected.

N. POTENTIAL EMPLOYEE EXPOSURE. Employees exposed to potential health hazards may be included in medical surveillance programs. In addition, exposure records and medical records must be made available to employees or their designated representatives in a reasonable time, place, and manner. If you have difficulty obtaining any employee exposure records, call your DRMS Safety and Health Manager. Employees that are exposed or injured in such a manner to become placed on medical surveillance should contact the DRMS Occupational Safety and Health department for assistance. This is necessary to ensure continued medical surveillance should the employee transfer, separate, etc. Any examinations, etc., will be given at government expense for work related injury or illness.

CHAPTER VI – RADIATION PROGRAM

Revised August 3, 2005

A. Radiation Program. The Defense Reutilization and Marketing Service (DRMS) Radiation Protection Policy is centered on Prevention. DRMS policy is not to physically accept any items or material containing any level of radioactivity. DoD 4160-21.M and DLA.I 4145.8 has policy and procedure for the Reutilization, Transfer, Donation, and Sales of Low Level Radioactive Material (LLR). Detection of LLR starts by visual inspection of receipts. Gate Monitors and hand held radiation meters alert the possible presence of LLR. NSN numbers have been programmed into DAISY as SALD (Safety Alert Latent Defect) items, alerting DRMO receivers to potential LLR material.

B. Radiation. Radiation is an energy given off by an unstable atom as it decays. Many radioactive materials, such as radium, uranium, and others, occur naturally and are found in the ground. These and other sources of naturally occurring radiation make up what is commonly referred to as background radiation. This is low level radiation that is always present, and varies by geographic region or area. **The Radiation Gate Detector System is primarily designed for Scrap metal.** It can detect some radioactive materials in containerized receipts. The most important factors to consider when using gate monitors to detect radioactive materials is:

- Background radiation is not constant. It is continually changing due to cosmic events, weather, and other influences.
- The farther away from the source of radiation, the less it can be detected.
- The longer the time that the detectors have to look at the source, the better the reading will be. For this reason, the slower the vehicle passes through the system, the better the chance for detecting a potential source.
- The amount of scrap and its density play a large part in the detector's ability to detect a potential source. The more material between the sources, the more difficult for the instrument to detect.
- The larger the detector (Sodium Iodide), the more sensitive it will be.
- The more shielded the detector is, the more sensitive the detector will become.

Considering all the above circumstances, the most effective way to monitor loads is to have large detectors as close to the receipts as possible, and moving past the system as slow as possible. Another factor is to monitor the system, making adjustments to the detector in order to keep the alarm as close to background as possible without causing "false alarms".

C. Radiation Gate Monitors. Most Radiation Gate Monitors or Radiation Detector Systems purchased by DRMS are manufactured by Ludlum Industries. The company is located in Sweetwater, Texas, their phone number is 1-800-622-0828. The Radiation Detector is designed to detect low levels of radiation in scrap passing through the system. Hand held detectors can also help to locate LLR material when processing material. When the Gate Monitor System detects a radioactive commodity, the alarm circuit will automatically activate and warn the user. Some systems are equipped with printers, which detail the time and date of the warning.

D. Calibration.
Radiation Detectors should be calibrated every other year, and immediately if the detector is involved in a mishap. Calibration is done by using the Cesium Calibration source, which was provided with the gate monitor. Your Gate Monitor Manual illustrates and explains how to calibrate your monitor. The DRMO should also have a video which would also clarify the calibration procedure. Some host Radiation Protection Officers will calibrate the Gate Monitor. If your RPO is unable to provide this service, contact the DES Battle Creek Safety and Health Office for assistance. If the DRMO does not have a copy of this service manual, another can be obtained by contacting the DRMS/DES Safety Office. It is important that you store your calibration chip in a safe and secure place, as it is the only tool (source) recommended for calibration. Ask your host Radiation Protection Officer for storage assistance, to ensure it will not be misplaced. Check your equipment daily to ensure it is operational. You can "walk" your Calibration chip through the monitor to ensure the alarm and system is operational.

E. Maintenance. Consult your operator's manual or trouble shooting guide, if your detector is experiencing any problems. If the detector was accidentally bumped or damaged, you are encouraged to contact the DES Battle Creek Safety Office or DES Battle Creek Facility Office for assistance. A SITREP report should be filed. The Ludlum Company does have a repair/calibration department and can be reached at 1-800-622-0828. To ensure your gate monitor gets serviced, follow these procedures:

- Contact DES Battle Creek Safety or DES Battle Creek Facilities to ensure funding is available.
- Call 1-800-622-0828. Talk with a Ludlum technician to determine what needs to be repaired.
- Confirm with the Ludlum technician if a local electrician or host electrician can perform the repair. Provide Facilities/Safety with a repair estimate to include parts and labor (for approval).
- Most repairs can be paid for using the IMPAC card.
- If the repair exceeds the limits of the IMPAC card, DES Battle Creek Facilities will fund accordingly.
- Remember to follow all applicable procedures for the use of the IMPAC Card.
- You are advised to consult your operator's manual or trouble shooting guide, if your detector is experiencing any problems.

F. Procurement. Some DRMO's receive a higher amount of radioactive material (receipts) than others. DRMOs that are located on Military installations where there is a higher receipt rate of LLR are candidates for Gate Monitors. The following is the criteria for consideration:

- SITREPs indicating a high traffic of radioactive items through the DRMO.
- Quarterly Radiation Surveys indicating high item discovery.
- Host Radiation Protection Officer Support.
- Volume of Scrap Metal.
- Headquarter Approval.
- Fund Availability.

1. Procurement Procedures.

- DES Battle Creek determines, in coordination with DRMS Operations/DEMIL, where Radiation Detectors should be located, what type, and prioritizes.

- DES Battle Creek Facilities coordinates with DRMO personnel to have the DRMO submit a work order based on the arrival of the equipment, to the host, and obtain a cost estimate.
- DRMO will forward the Host work order cost estimate, to DES Battle Creek Facilities.
- DES Battle Creek Safety purchases the proper Radiation Detector(s) and has them shipped to the designated location(s).
- DES Battle Creek Facilities transfers funds to the appropriate FST to forward a MIPR to the host. This transfer ensures the appropriate funding for the pre-installation of the detector. This includes engineering, laying of concrete, power, etc.
- The host installs the necessary equipment support elements: posts, power, communication, etc.
- DES Battle Creek Facilities will track the status of the equipment installation funds/projects and coordinate with DES Battle Creek Safety when the pre-installation is complete.
- DES Battle Creek Safety arranges for equipment installation, hook-up, calibration, and training for the detector.

H. Hand-Held Radiation Meters. If funds are available, and the DRMO has a need for a Radiation Meter (per recommendation from their host Radiation Protection Officer), DRMS Safety and Health and/or Facilities/Equipment can purchase one for you.

1. All Radiac meters will be calibrated annually. Radiac Meters should be used for the receipt, transfer, storage, removal and transport of material back to the generator. Your host RPO can advise you regarding calibration of the Radiac Meter.

2. Radiac Meters are very sensitive and can be placed closer to the source, especially during the receipt process. It is not necessary that the user become proficient in the use of the Radiac Meter, only to use it as a means of detection. Should the DRMO discover a potential source, the host Radiation Protection Officer can be summoned to assist with removal, storage, and transport back to the generator. The Radiac Meter can also be used to check out-going shipments of material prior to release.

I. Inter-Service Support Agreements (ISSA). If your DRMO has a history of inadvertently receiving Low Level Radioactive items (LLR), then the DRMO should ensure that their ISSA complements their operation. A copy of an Inter Service Support Agreement is attached (Enclosure 7). At a minimum, the ISSA should have the following support from the host:

- Ensure at least 4 quarterly radiation surveys are conducted at the DRMO.
- Ensure the host RPO will respond to assess materials identified as potentially containing radioactive material.
- Ensure the host has the capability to remove the radioactive source.
- Ensure the host could provide radioactive training if requested.
- Ensure the host can provide assistance in removal efforts by packaging, labeling and storage. If the DRMO does not have this support, the DRMO should contact DES-Battle Creek (DES-WRH) (DES-WRH) Safety and Health Office.
- Ensure the host can assist the DRMO with calibration, training and usage of hand held Radiac Meters or the Radiation Detector.

J. Training. As part of the installation contract, a Ludlum Technician will provide training on the gate monitor, as well as the hand held Radiac Meter. The DRMO should allow at least three employees to participate in the training session. The training will consist of Start-up, calibration and troubleshooting. Each operator should become thoroughly familiar with the set up and operation of the monitor. The DRMO should advise the host Radiation Protection Office of the training and request their attendance. DES Battle Creek Safety and Health Office also have training films pertaining to your Gate Monitor, and are available upon request.

K. Employee Awareness. Radioactive materials arrive at the DRMO in many ways. It could be through improper identification of receipts, or material misplaced or mixed in a container. In any case, detection at the early stage of receipt is very important, because the identity of the generator is easier to determine. Every effort should be made to return the material to the generator as it is very expensive to dispose of radioactive materials. If generator identity is lost, DRMS then has the burden for disposal. It is important that the receiver opens enough packages to feel confident the remaining items are free of radioactive items. This is especially true for material being transshipped to outside contractors. If LLR is discovered, and the generator wishes to dispose of the radioactive items, DES Battle Creek, Safety and Health Office will offer assistance.

L. Low Level Radiation. Materials containing low level radiation may inadvertently be transported to our contractor facilities, such as our Demanufacturing Contractors. In some cases, these items have visible radioactive emblems. An even larger problem results when radioactive materials are shipped to a contractor scrap yard or smelter. Additional procedures that can be taken are:

- Review receiving documents closely for any labels, signs, etc., which may indicate low level radioactive material. Insure the turn in documents are certified.
- Return any material to the generator flagged by DAISY that indicates the material may contain a radioactive source.
- File a Situation Report (SITREP) for any radioactive material entering the DRMO. This includes those items returned to the generator. Be able to provide an NSN number, a copy of the DD Form 1348-1A, the emission source level, and a copy of the 917 (Return to Generator Document).
- Follow all guidance pertaining to R/T/D and Sales of Radioactive commodities according to DLAM 4160.21M.

M. Material arriving at the contractor site. The following procedures will be taken when Radioactive Material is discovered at the contractor’s facility:

- The demanufacturing contractor notifies the COR/COTR immediately.
- The COR will contact DES Battle Creek Safety and Health Office and the Contracting Officer for assistance regarding the safety and health risks of the material. The COR will provide the safety office with the NSN, item description, and the level of radioactivity. The COR will advise DES-Battle Creek (DES-WRH) (DES-WRH) Safety and Health Office the location from which the material was shipped. A SITREP will be prepared and forwarded.
- Should radioactive material be discovered, the contractor (e.g., procurement and demanufacturing contractor) shall take appropriate steps to protect personnel and property. The contractor shall notify the COR/COTR and the CO immediately and the government will arrange to have the material removed.

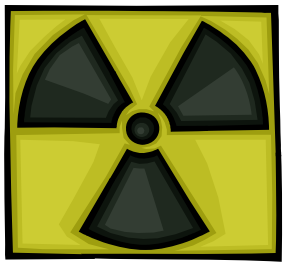
- The DES-Battle Creek (DES-WRH) Safety and Health Office, in conjunction with the COR/COTR, will determine whether the material is to be returned to the generator or processed. DES-Battle Creek (DES-WRH) Safety and Health Office will coordinate with a Disposal Facility if the material has been determined Rad Waste. Any special handling requirements will be advised to the COR.
- If the material is to be returned, the COR will make arrangements with the shipping DRMO.
- The DRMO will contact the generator to make transportation arrangements.

  Every effort must be made to quickly remove radioactive items at contractor facilities, as it could result in fines or adverse publicity.

N. Customer Receipts. Oftentimes, the generator is unaware that radioactive material can be properly disposed of or stored by their respective services. This could be because they are unaware of who to contact. The below numbers can offer customer assistance:

- **United States Army**. Rock Island Radiation Retrieval. Phone number is (309) 782-0338.
- **United States Navy.** Navy Rad Office. (757) 887-4692.
- **United States Air Force.** Brooks Air Force Base. (210) 536-6029.

Note: Rock Island Radiation Retrieval is the Chartered Department of Defense Agency. They have Health Physicists on Staff which will assist towards labeling, handling, shipping, storage, and disposal of radioactive items.



DO NOT ACCEPT, HANDLE OR STORE RADIOACTIVE ITEMS.

DO NOT SELL RADIOACTIVE ITEMS.

DO NOT SELL RADIOACTIVE ITEMS ON THE INTERNET.

RAD ITEMS THAT HAVE HAD THE ISOTOPE REMOVED MUST BE CERTIFIED.

WHEN ITEMS HAVE BEEN CERTIFIED, LABELS MUST BE REMOVED.

O. Gate Detection.

1. If any item sounds the gate alarm, either refuse the truck or contact your host RPO; which ever is your DRMO policy (Some DRMOs have Inter Service Support Agreements and RPOs that remove and consolidate Radioactive Isotopes, some do not). Place the incident in a log and forward the log monthly to DES-Battle Creek (DES-WRH) Safety and Health Office.
2. Visually inspect all packages for the black and yellow radioactive label. Inspect the item. If you see a Radiation label on the package or item, contact your RPO for verification. If the item is a radioactive commodity, return it to the generator.
3. Place the NSN number into DAISY. If the item produces a SALD Alert indicating the item may contain radiation, follow the steps in 2.
4. If the identification of the generator is unknown, contact DES-Battle Creek (DES-WRH) Safety and Health Office. Place the material in a remote area of the warehouse.
5. Prepare a SITREP report on the incident.
6. Aircraft Engines are never received unless certified by a Radiation Protection Officer as being free of any radioactive components.

Enclosure 1
DRMS-I 6055.1

PRECAUTIONARY STATEMENTS BY TOXICITY CATEGORY

Toxicity Category	Oral, Inhalation, or Dermal Toxicity
I	Fatal (poisonous) if swallowed (inhaled or absorbed Through skin). Do not breathe vapor (dust or spray Mist). Do not get in eyes, on skin, or on clothing. Front panel statement of practical treatment required.
III	Harmful if swallowed (inhaled or absorbed through skin). Avoid breathing vapors (dust or spray mist). Avoid contact with skin (eyes or clothing). Appropriate first aid statement required.
IV	No precautionary statements required.

Toxicity Category	Skin and Eye Local Effects	Label
I	Causes eye and skin damage. Do not get in eyes, on skin, or on clothing. Wear goggles and face-shield and rubber gloves when handling. Harmful or fatal if swallowed. Appropriate first aid Statement required.	DANGER LABEL
II	Causes eye and skin irritation. Do not get in eyes, on skin, or on clothing. Harmful if swallowed. Appropriate first aid statement required.	WARNING LABEL
IV	No precautionary statements required.	CAUTION LABEL

ALL PPE MUST BE CERTIFIED BY THE SUPERVISOR/DRMS-BC-W*H* BASED ON LOCAL HAZARD ASSESSMENT

	HARD HAT	EYE PROTECTION	GLOVES	HEARING PROTECTION	SAFETY SHOES	RESPIRATOR	APRON, PLASTIC OR RUBBER	EYE AND BODY WASH
RECEIVING OPERATIONS	1	1	RQD	2	RQD			
WAREHOUSING OPERATIONS	1	1	RQD	2	RQD			
LOADING/UNLOADING OPERATIONS (MANUAL)	1	RQD	RQD	2	RQD			
FORKLIFT OPERATIONS	1	RQD		2	RQD			
SCRAPYARD OPERATIONS	RQD	RQD	RQD	2	RQD			
METAL SALVAGE, HANDLING, SEGREGATION AND SHORTING	RQD	RQD	RQD	2	RQD			
HAND HELD POWER TOOLS		RQD		2				
BANDING AND STRAPPING		RQD	RQD		RQD			
PAINTING, SPRAY AND BRUSH		RQD				4		
CLEANING SOLVENTS		RQD				4		
GRINDING		RQD		2				
POWER SAW OPERATION		RQD		2		5		
RAG AND PAPER BALING		RQD	RQD	2	RQD			
CRANE SIGNALMAN	RQD	RQD	RQD	2	RQD			
CRANE OPERATIONS	RQD		RQD		RQD			
CABLE STRIPPING	RQD	RQD	RQD		RQD			
BATTERY HANDLING (MANUAL)	1	RQD	RQD		RQD		RQD	RQD
TORCH CUTTING		RQD	RQD		RQD	RQD		
WELDING/BRAZING					RQD	RQD		
HANDLING NON-LEAKING PROPERLY PACKAGED HAZARDOUS PROPERTY		RQD	RQD		RQD			RQD
HANDLING NON-LEAKING PCB ITEMS		RQD	RQD					
SPILL CONTAINMENT/CLEANUP OF HAZARDOUS PROPERTY	6	6	6	2	6	6	6	6

ALL PPE MUST BE CERTIFIED BY THE SUPERVISOR/DRMS-*KH* BASED ON LOCAL HAZARD ASSESSMENT (Cont'd)

	WELDER'S LEATHERS	WELDER'S HELMET	TYVEK COVERALLS
RECEIVING OPERATIONS			
WAREHOUSING OPERATIONS			
LOADING/UNLOADING OPERATIONS (MANUAL)			
FORKLIFT OPERATIONS			
SCRAPYARD OPERATIONS			
METAL SALVAGE, HANDLING, SEGREGATION AND SORTING			
HAND HELD POWER TOOLS			
BANDING AND STRAPPING			
PAINTING, SPRAY AND BRUSH			
CLEANING SOLVENTS			
GRINDING			
POWER SAW OPERATION			
RAG AND PAPER BALING			
CRANE SIGNALMAN			
CRANE OPERATIONS			
CABLE STRIPPING			
BATTERY HANDLING (MANUAL)			
TORCH CUTTING	RQD	RQD	
WELDING/BRAZING	RQD	RQD	
HANDLING NON-LEAKING, PROPERLY PACKAGED HAZARDOUS PROPERTY			
HANDLING NON-LEAKING PCB ITEMS			RQD
SPILL CONTAINMENT/CLEANUP OF HAZARDOUS PROPERTY	6	6	6

RQD – REQUIRED WHEN PERFORMING THE TASK

1 – BASED ON LOCAL REQUIREMENTS, I.E. IDENTIFIED HARD HAT AREA, NOISE HAZARD AREA. FLYING PARTICLES ETC. HARD HAT MUST BE AVAILABLE TO PMHE EQUIPMENT OPERATORS AT ALL TIMES WHILE THEY ARE OPERATING EQUIPMENT.
2 – BASED ON INDUSTRIAL HYGIENIST RECOMMENDATIONS
3 – EQUIPMENT LABELED AS NOISE HAZARD, ETC.
4 – REFER TO HOST IH OR DRMS-***BW*** FOR TYPE, REQUIREMENT, ETC.
5 – DEPENDS ON TYPE OF MATERIAL CUT
6 – BASED ON LOCAL SPCC REQUIREMENTS.

FIRE SAFETY STANDARD OPERATING PROCEDURES (SOP)

The DRMO Chief is responsible to assure that:

- Suitable areas for torch cutting are designated and that only Sites with the lowest possible fire potential are selected.

- A DEMIL supervisor is appointed and is responsible to obtain hot Work permits from the Host authorizing torch cutting sessions. Work will not be permitted without a permit or other authorization as specified in the Installation Fire Prevention Plan.

- All cutters, fire watch personnel and their supervisors are properly trained in the safe operation of their equipment and are aware of their responsibilities in the event of a fire. Contact your host fire department if your staff requires additional training. Issue a letter of appointment to confirm employee qualifications and also annotate the 7B card.

- Where DEMIL is performed by a contractor, then the Contracting Officer's Representative (COR) or Sales Contracting Officer assures that they are apprised of and comply with the fire prevention requirements in this letter and the Installation Fire Prevention Plan.

DEMIL supervisors are responsible to assure that:

- A comprehensive Industrial Hygiene Survey or Evaluation of the DEMIL operation is performed by the Host Industrial Hygienist.

- Proper Personal Protective Equipment (PPE) is available for use by torch cutting personnel.

- Personnel are properly trained in the selection and use of PPE.

- Cutting equipment to be used is in satisfactory operating condition and is in good repair.

- Fire protection and extinguishing equipment are properly located at the site and is serviceable.

- Only properly trained DRMO or contractor personnel are permitted to perform cutting operations or other DEMIL procedures.

- Before torch cutting is permitted, someone must be assigned the responsibility to assure that the work to be performed is in an approved location free from combustible materials. If not possible, the work must be moved to a location free from combustibles or the combustibles must be shielded to prevent ignition.

- Work that would expose combustible materials to ignition during cutting operations is not scheduled.

- Torch cutting operations by DRMO or contractor personnel are conducted only IAW the installation hot work permit or equivalent authorization.

- Before cutting is permitted, the supervisor must inspect the site to ensure that it is a fire safe area.

Torch cutters must:

- Be properly trained in equipment use and fire prevention responsibilities before conducting torch-cutting operations.

- Conduct cutting operations only IAW the installation hot work permit or equivalent authorization.

- Assure that, before work commences, combustible materials, as identified above, are cleared from the work area for a radius of at least 35 feet. Where this is not possible, assure that combustibles are protected with flameproof covers or otherwise shielded with metal or fire-resistant shields, guards or curtains. Edges of covers at the floor level shall be tight to prevent sparks from passing beneath. Pay particular attention to overlaps when more than one cover or curtain is required.

- When cutting near combustible walls, partitions, ceilings or roofs, assure that fire-resistant shields or guards are used to prevent ignition. Where combustibles are located on the other side of these structures and cannot be relocated, a fire watch personnel must be provided to assure fire safety.

- Verify that materials to be cut do not contain combustible liquids or components such as may be found in sandwich type panel construction.

- Assure that fully charged and operable fire extinguishers, appropriate for the class of fire anticipated, are located at the torch cutting site during operations.

Fire watch personnel must:

- Be present whenever open flame torch cutting operations are performed.

- Have fire-extinguishing equipment readily available and be trained in its use.

- Be familiar with procedures for sounding an alarm in the event of a fire, to watch for fires in all exposed areas and try to extinguish them only when obviously within the capability of the available equipment and doing so will not endanger themselves, or if not sound the alarm.

- Remain onsite for at least one half hour after cutting operations are completed to detect and extinguish smoldering fires. Contractors must provide their own fire-watchers when required.

FROM: DRMO _____

TO: DRMS-KH

SUBJECT: INDUSTRIAL HYGIENE SURVEY FREQUENCY

A determination as to the frequency of Industrial Hygiene Surveys to be conducted at DRMO_____, is based on the following DoD instruction and guidance:

DODI 6055.5, paragraph 6.1.1.1 requires that *"Comprehensive periodic evaluation of all potential health hazards in each workplace and ancillary facilities shall be conducted to ensure that workers are not exposed to recognized hazards."*

Sufficient records shall be maintained in accordance with DODI 6055.5, paragraph 6.6.3.2, to ascertain the presence or absence, nature, and degree of occupational health hazards.

DODI 6055.5, paragraph 6.1.1.2 notes *"Regardless of the techniques used, the result should be a definite determination as to the presence, absence and degree of health hazard from the use of that chemical".* Paragraph 6.1.1.2 also states: *Similar evaluations and definite statements should be made for all biological and physical agents in each workplace".* Paragraph 6.1.1.3 states *"The results of those efforts should form the bases for overall assessment of the health hazards in each workplace. The assessment then can be used to assign priorities for abatement actions, to schedule future surveys, to require personal protective equipment, and to provide a basis for determining the requirement and scope of periodic medical surveillance of workers".*

An annual **safety** inspection by a qualified Safety and Health professional will still be conducted. This individual may be the DRMS Safety Manager or similarly qualified host command safety professional.

Based on the most recent annual safety inspection dated:_____ and a careful review of the most recent Industrial Hygiene survey dated:_____, it is determined that another Industrial Hygiene survey need not be conducted for:

[__] an indefinite period, or [__] a period of _____ years.

Any process change shall be reported to the DRMS Safety Manager immediately. An Industrial Hygiene survey will be required if any occupational processes change that will introduce new hazards into this workplace. A letter is attached by the host indicating the above stipulations.

Monitoring DRMS Contractors Performing on a DOD Installation

CORs/COTRs/AGRs will:

- Know safety related contract clauses and requirements
- Monitor contractor's safety performance and report to the contract officer (CO) IAW their letter of designation
- Promptly intervene in any situation considered IDLH – Immediately Dangerous to Life or Health
- Verify contractor's compliance as directed by the CO

Items to monitor/verify include, but are not limited to:

Contingency orientation:

- Contractor originally advised of emergency procedures, alarm designations, evacuation routes, etc…
- Contractor advises temporary or transient personnel of procedures, designations, routes, etc…

Host installation policies/procedures:

- Contractor complies with unique installation requirements

Hazard communication program (HCP):

- Contractor complies with requirement to have a copy of contractor's and DRMO's HCP on-site and available to contractor employees, government employees and visitors

Personal protective equipment (PPE):

- Required PPE is used properly

Government furnished equipment (GFE):

- If applicable, GFE is maintained properly
- If applicable, GFE inspection checklist is completed
- GFE being operated safely
- GFE usage is recorded
- Damaged GFE is recorded via DLA Form 1591 and repaired IAW contract provisions

Government furnished facilities (GFF):

- Damaged GFF is recorded via DLA Form 1591 and repaired IAW contract provisions
- Housekeeping is clean and orderly

Training:

- Contractor personnel are trained/certified for:
    - Using PPE
    - Operating GFE
    - Operation of contractor's tools, equipment, etc…
    - Handling HM/HW

Enclosure 6

PERSONAL PROTECTIVE EQUIPMENT
HAZARD ASSESSMENT/CERTIFICATION

PURPOSE: A hazard analysis and certification are required components of a complete personal protective equipment (PPE) program required by 29 CFR 1910.132(d) Hazard Assessment and Equipment Selection. The assessment provides information needed to select the appropriate PPE for the hazards present or likely to be present in the workplace.

DRMO_____ Date_____

Employee Name_____ **Department**_____

Description of Job Activities:

_____

Employee Certification: I acknowledge that my supervisor has instructed me on the hazards associated with my job and the PPE required.

_____ _____
Employee
Date

Supervisor Certification: I certify that I am this employee's supervisor and that the workplace has been assessed to determine if hazards are present, or likely to be present, which necessitate the use of personal protective equipment (PPE). I further certify that I have selected properly fitting PPE required to protect employees from all hazards identified in the hazard assessment and informed the employee of the job functions which require the use of PPE and that they must use the PPE when performing these functions.
Supervisor _____
Date _____

PERSONAL PROTECTIVE EQUIPMENT
TRAINING/CERTIFlCATION

PURPOSE: This personal protective equipment (PPE) certification of training is designed to satisfy the requirement of 29 CFR 1910.132 (f) Training.

DRMO _____ **Date** _____

Employee Name _____ **Department** _____

Description of Job Activities:

_____

Employee Certification: I acknowledge that I have received the training specified in the supervisor's statement below and, based on this training, that I know how to select and use the required personal protective equipment required when performing my job and have demonstrated this as required.

_____ _____
Employee **Date**

Supervisor Certification: **I** certify that I am this employee's supervisor. I also certify that I have ensured that the training required by the OSHA reference above has been provided to include at least the following criteria: When PPE is necessary; what PPE is necessary; how to properly don, doff, adjust and wear PPE; the limitations of PPE; the proper care, maintenance useful life and disposal of the PPE and the reasons why they must be worn. I further certify that the employee has demonstrated an understanding of the training and the ability to use the PPE properly.

_____ _____
Supervisor **Date**

SOME TYPES OF EXPOSURE HAZARDS:

1. Chemical Exposure:
   a. Chemical exposure working with Hazardous Materials or Hazardous Waste.
   b. Chemical exposure working either outdoors or indoors. Could be battery-charging, painting, cleaning agents, photographic, and photocopy.

2. Toxic Gas/Inhalant Exposure:
   a. Exposure to asbestos, dust, PCB dust, lead, fumes from cutting and welding, gasoline, LP gas, plating, paint fumes, and grinding.

3. Motion/Impact Hazards:
   a. Forklift/MHE hazards to include loading and unloading trucks, driving near docks, blind spots, terrain difficulties, loading and unloading racks, warehouse activities, and overhead cranes.
   b. Dollies, end loaders, bucket loaders, cranes and GSA vehicles.
   c. lifting, bending, carrying, and opening of boxes.
   d. Grinding, cut off shears, balers, shredders, lawn mowers, weed cutters, and power tools.
   e. Overhead doors (automatic and manual), fans, compressors, and switchboxes.

4. Office Hazards:
   a. Power switches, chemicals, paper cutters, copy machines, filing cabinets, and emergency phone numbers.

5. Penetration Hazards:
   a. Scrap metal, nails, wire, banding machines, drills, power tools, forklift forks, and broken glass.

6. Heat/High Temperature Hazards:
   a. Cold and warm weather, microwaves, torch cutting, welding, brazing, and soldering.

7. High noise Hazards:
   a. Yard end loaders, forklifts, fans, flight lines, balers, shredders, cranes, grinders, compressors, and power tools.

Enclosure 7.

Radiation Interservice Support Agreement.

Provider will:

A. Provide periodic surveys (through Radiation Protection Officer) of facilities to identify any radioactive commodities that were inadvertently turned into the receiver.

B. Conduct a survey not less than quarterly, but more frequently should conditions warrant.

C. Respond to assess materials identified by the receiver as potentially containing radioactive material.

D. Remove or physically retrieve any radioactive/radioactive contaminated property received by the DRMO activity within 24 hours of notification and/or secure the property and place in proper storage.

E. Certify that the commodity no longer contains a radioactive source. Evaluate and/or characterize the immediate health and safety considerations at the DRMO activity and recommend or take necessary action to guard against exposure to radiation (using dose limits for exposure to individual members of the public (10 CFR 20).

F. Include DRMO in local radiation awareness training and education efforts.

Receiver will:

A. Participate in the local radiation education programs.

B. Identify, isolate and notify the provider of potential radioactive commodities.

C. Aid the provider in removal efforts by providing packaging, MHE and other related items as necessary.

D. Notify the provider and request response to gate monitor activation, should the receiver have such a devise installed.